GESNERIADS

The Journal for Gesneriad Growers

Vol. 59, No. 1



Saintpaulia ionantha

The Gesneriad Society, Inc.

A non-profit membership corporation chartered by the State of Missouri

HONORARY OFFICERS

Founder — Elvin McDonald Co-Editor of THE GLOXINIAN — Peggie Schulz (1951–1961)

Past Presidents — Mrs. H. E. Dillard (1954–56); Mr. F. W. Mitchell (1956–58); Bruce A. Thompson (1958–62); William H. Hull (1962–65); Charles Marvinny (1965–68); Dr. Thomas E. Talpey (1968–69); Alice Courage (1969–72); Ann Spencer (1972–75); Martin Tanner (1975–77); Emma Lahr (1977–79); Laura Progebin (1979–81); David Masterson (1981–83); Patricia Van Deventer (1983–85); Michael A. Riley (1985–89); Jessie Crisafulli (1989–93); Lee Linett (1993–97); Jon Dixon (1997–2001), Susan Grose (2001–2005); Carol Ann Bonner (2005–2007)

OFFICERS

President — Peter Shalit, 1122 East Pike St., PMB 637, Seattle, WA 98122-3916 prist Vice-President — Paul Susi, 117-01 Park Lane South, Apt. C1A, Kew Gardens, NY 11418, ps117@earthlink.net>
Second Vice-President — Julie Mavity-Hudson, 1015 Park Lane, Joelton, TN 37080 Zulie, Mavity-Hudson@vanderbilt.edu>
Corresponding Secretary — Kathy Spissman, 4086 Brown Lee Dr., Tucker, GA 30084 <mrsstrepstreps@comcast.net>
Recording Secretary — Allison Brigham, 1122 8th St., Golden, CO 80401-1109 <a href=

DIRECTORS

Term 2006–2009 — Allison Brigham, Doris Brownlie, Becky Fontes, Mollie Howell, Paul Lee, Leslie Milde, Lee Stradley Term 2007–2010 — Alan LaVergne, Ingrid Lindskog, Bill Price, Peter Shalit, Kathy Spissman, Paul Susi, Beverley Williams Term 2008–2011 — Jacquie Eisenhut, Gussie Farrice, Dariane Joshlin, Stephen Maciejewski, Charlene Marietti, Julie Mavity-Hudson, Leonard Re

COMMITTEE CHAIRPERSONS

Archives - Lee Stradley, 1923 Cole Place, Vestal, NY 13850 <leestradley555@aol.com>

Awards - Jo Anne Martinez, 809 Taray de Avila, Tampa, FL 33613 <4jam@tampabay.rr.com>

Awards of Appreciation — Molly Schneider, 608 Hillwood Dr., Nashville, TN 37205-1314 <molly608sch@comcast.net>

Bylaws and Parliamentarian — Debra LaVergne, 2369 St. Francis Dr., Palo Alto, CA 94303 <elegantella@earthlink.net>

Chapters and Affiliates — M.J. Tyler, PO Box 1159, Poulsbo, WA 98370 <mjtyler2@gmail.com>

Frances Batcheller Endowment Fund — Tom Bruning, 31233 Beechnut Rd., Treynor, IA 51575 <tbruning@mail.unomaha.edu>
Gesneriad Register — Judy Becker, 432 Undermountain Rd., Salisbury, CT 06068-1102 https://doi.org/10.240/britches/burs/432 (ON, M5V 375 Canada https://doi.org/10.240/britches/burs/432 (ON, M5V 375

Insurance — Helen Bortvedt, 20 Beeson Rd., Sequim, WA 98382-8870 hmbort@olypen.com

Internet Communications — Julie Mavity-Hudson, 1015 Park Lane, Joelton, TN 37080 < Julie.Mavity-Hudson@vanderbilt.edu>

Library and Education — Vivian Scheans, 4660 Dogwood Dr., Lake Oswego, OR 97035 < vscheans@comcast.net>

Newsletters — Leslie Milde, 373 Main St., (P.O. Box 14), Fremont, NH 03044 <meribush@aol.com>

 $\textbf{Photography} — \textit{Julie Mavity-Hudson}, 1015 \; \textit{Park Lane, Joelton, TN 37080} < \textit{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \textit{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \text{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \text{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \text{Park Lane, Joelton, TN 37080} < \text{Julie.Mavity-Hudson@vanderbilt.edu} > 1015 \; \text{Park Lane, Joelton, Joelton, TN 37080} < \text{Park Lane, Joelton, TN 37080} < \text$

Properties — Doris Brownlie, 80-600 Silvercreek Blvd., Mississauga, ON, L5A 2B4 Canada <jtbrownlie@idirect.com>

Publicity Membership Promotion — Fay Wagman, 52 Harper Dr., Pittsford, NY 14534 <fayw@aol.com>

Review — Suzie Larouche, 50 John Street, Suite 710, Toronto, ON, M5V 3T5 Canada <suzielaro@gmail.com>

Seed Fund — Species: Carolyn Ripps, 21 Sprain Rd., Hartsdale, NY 10530 <rippscs@aol.com>

— Hybrids: Gussie Farrice, 121 Nelson Ave., Staten Island, NY 10308 <f.farrice@verizon.net>

Selby Gesneriad Project — Stephen Maciejewski, 2030 Fitzwater St., Philadelphia, PA 19146 teciu@verizon.net Shows and Judging — Ben Paternoster, 14 Coptor Ct., Huntington, NY 11743-2335 technology: ben9@optonline.net >

Speakers Bureau — Karyn Cichocki, 79 Beaver Run Rd., Lafayette, NJ 07848 <speakers@gesneriadsociety.org>

Standing Rules — Susan Grose, 4201 W. 99th St., Overland Park, KS 66207-3732 <sagrose@aol.com>

INTEREST GROUPS

Judges Interest Group — Calendar year subscription to *Appraisal* newsletter, 3 issues, \$6 (postal mail) or \$3 (email/full color). Send to Jennifer Howland, 361 Townhouse, Hershey, PA 17033-2385. (Subscribing to *Appraisal* is part of the responsibility of remaining an active judge.)

Gesneriad Hybridizers Association — *CrossWords*, 3 issues, \$8 (\$9 outside U.S.A.). Send to Martha Lacy, 260 Stoddards Wharf Rd., Gales Ferry, CT 06335 <wlacy@snet.net>.

Newsletter Editors — Newsviews, free to editors; \$6 subscription to others. Contact Leslie Milde, 373 Main St., P.O. Box 14, Fremont, NH 03044 <meribush@aol.com>

FRIENDS AT LARGE

Gesneriphiles Internet Discussion Group — To join, visit the website where you will find instructions for joining the list: http://lists.ibiblio.org/mailman/listinfo/gesneriphiles

British Streptocarpus Society — <www.streptocarpussociety.org.uk> To join from the USA/Canada send \$12 check payable to Dale Martens, 1247 Island View Dr., Sherrard, Illinois 61281. To join from any other country, send £8 or 12€ to Peter Pinches, 72 Coopers Rd., Handsworth, Birmingham, England B20 2JX.

Marie Selby Botanical Gardens — 811 South Palm Avenue, Sarasota, FL 34236 (914-366-5731) www.selby.org Gardens open 364 days a year from 10:00 a.m. to 5:00 p.m. Admission fee; members free. Outdoor gardens, tropical display house, tree lab, al fresco lunch cafe, plant, book and gift shops.

GESNERIADS is published quarterly by The Gesneriad Society, Inc., Lawrence, KS 66044-9998. Copyright © 2009 The Gesneriad Society, Inc., Postage paid at Lawrence, KS 66044. Postmaster: Address of Record: The Gesneriad Society, Inc., 1122 East Pike Street, PMB 637, Seattle, WA 98122-3916 USA.

The Gesneriad Society, Inc.

(formerly the American Gloxinia and Gesneriad Society, Inc.)

EDITOR

Jeanne Katzenstein 1 Hallvard Terrace, Rockaway, NJ 07866 <editor@gesneriadsociety.org>

EDITOR'S DEADLINES

First Quarter	October 1
Second Quarter	January 1
Third Quarter	April 1
Fourth Quarter	July 1

EDITORIAL STAFF AND CONTRIBUTING EDITORS

Frances Batcheller (honorary), Judy Becker, Dale Martens, Julie Mavity-Hudson, Peter Shalit

CONSULTING TAXONOMIST

Dr. Laurence E. Skog

TAXONOMY REFERENCE WEBSITE

http://botany.si.edu/gesneriaceae/checklist/

BOTANICAL REVIEW

Bob Stewart <aeschynanthus@verizon.net>

BUSINESS MANAGER

Michael A. Riley 101 West 104th Street, New York, NY 10025 <riley2362@aol.com>

ADVERTISING MANAGER

Tom Bruning

31233 Beechnut Road, Treynor, IA 51575 <advertising@gesneriadsociety.org>

RIGHT TO REPRINT — The right to reprint or quote extensively from GESNERIADS is reserved; permission may be requested from the Editor. GESNERIADS follows the International Codes of Nomenclature, including The International Code of Nomenclature for Cultivated Plants (1995). Views published in GESNERIADS are not necessarily those of the editors, the Society, or its officers.

OBJECTS OF THE SOCIETY — The objects of The Gesneriad Society are to afford a convenient and beneficial association of persons interested in gesneriads, to stimulate a widespread interest in, gather and publish reliable information about the identification, correct nomenclature, culture and propagation of gesneriads; and to encourage the origination and introduction of new cultivars.

GESNERIAD REGISTRATION — The Gesneriad Society, Inc. is the International Registration Authority for the names and cultivars of gesneriads excepting the genus Saintpaulia. Any person desiring to register a cultivar should contact Judy Becker, 432 Undermountain Road, Salisbury, CT 06068 https://doi.org/10.108/journal.com/

visit www.gesneriadsociety.org

GESNERIADS

The Journal for Gesneriad Growers

Vol. 59, No. 1 First Quarter 2009

CONTENTS

President's Message — Peter Shalit4
Coming Events 5
Seed Fund — Carolyn Ripps & Gussie Farrice 6
The Genus Saintpaulia — Laurence Skog & Jeanne Katzenstein12
Gesneriad Society Publications20
GEMS of the National Capital Area — Lee Linett21
53rd Annual Convention23
Touring DC's Horticultural Gems — Nell Hennessy35
Saintpaulia — James F. Smith38
Additions to Hybrid Seed List44
Hybridizing with the Saintpaulia Species — Dr. Jeff Smith46
How I Became Hooked on Gesneriads — Nate Tschaenn52

COVER

Saintpaulia ionantha original 1895 illustration by Matilda Smith (after whom the genus Smithiantha was named)

President's Message

Our Website is a great gesneriad resource. Many members of The Gesneriad Society may not be aware of all that is available at **www.gesneriadsociety.org**. Our Webmaster, Julie Mavity-Hudson, spends many hours each month adding content to the site. Did you know:

...that you can view and download high-quality photos of every blueribbon-winning plant in our 2008 Convention Flower Show, and that there are convention photo galleries of people, events, and plants archived on the website for every convention starting with 1996?

...that you can purchase a copy of almost every back issue of THE GLOXINIAN/GESNERIADS since 1996, as well as our other publications and CD's, online?

...that the images of the covers of our back issues in the web store are actually downloadable PDF files containing the complete table of contents of each issue?

...that you can purchase Gesneriad Society shirts, caps, plant labels, tote bags, and lapel pins in the webstore?

...that in addition to the public areas of the site, there are bonus features in a members-only section which you can enter using your member number for your ID and surname for your password?

...that once you log in to the private members' area you can download your own electronic copy of every back issue of The GLOXINIAN from 1998 through 2003?

...that the two most recent issues of GESNERIADS are always available in the members-only area for download as complete, searchable PDF files for you to save on your computer?

...that you can renew your Society membership and register for the convention online using the site's convenient, secure process?

Links to all these features can be found on the front page of the website, <www.gesneriadsociety.org>. Check it out, bookmark it, and come back frequently!

Speaking of convention, this July our annual convention will be in Silver Spring, Maryland. In this issue you'll find information on the convention program as well as registration forms. I've noticed that most of our convention attendees also belong to Society chapters, leading me to wonder why more members-at-large don't attend. If you don't belong to a chapter, you may not know what "gesneriad camaraderie" is all about. You need a taste of what it's like to rub shoulders with other gesneriad friends, see the largest gesneriad show in the world, spend more than you can afford at the plant sale, hear lectures on topics you always wanted to know about. I'd like to encourage more of our members-at-large to attend. And anyone else who has never come to a convention – please, come join the fun. If you like gesneriads, you'll be in heaven.

Good growing,

4

GESNERIADS

Veter

Coming Events

March 14-15 – Illinois – The Northern Illinois Gesneriad Society show and sale at the Chicago Botanic Garden, 1000 Lake Cook Road, Glencoe (847-835-5440). Saturday and Sunday 10:00 am to 4:00 pm. Contact Susan Bradford (847-740-7801) <asusan.bradford@abbott.com>.

March 28-29 – Ontario, Canada – The Toronto Gesneriad Society judged show and sale at Sherway Gardens Shopping Mall, Etobicoke. Saturday 11:00 am to 6:00 pm; Sunday 11:00 am to 5:00 pm. Contact Doris Brownlie <jtbownlie@idirect.com> (905-270-6776).

e Gesneriad Society

March 28-29 – Washington – The Puget Sound Gesneriad Society (in conjunction with the Seattle African Violet Society) annual show and sale at Swanson's Nursery (new venue), 9701 15th Avenue NW, Seattle. Contact Show Chair Jean Chin <chin_jean@yahoo.com> or <puget soundgesneriadsociety.googlepages.com>

April 11-12 – New York – The Gesneriad Dicts of Western New York show and sale at the Perinton Square Mall, Routes 31 and 250, Fairport. Contact Irwin Wagman (585-381-6384) <i rwinwag@aol.com>.

From the editorial staff – Although we make every effort to portray the true color of each plant illustrated in GESNERIADS, this may not always be possible ... accurate color is especially challenging with the blue/violet flowers typical of Saintpaulia species.

This winter, keep your spirits warm with gesneriads that like it hot!

Episcia reptans antique botanical print on a natural or Vegas gold 100% cotton tee, small through XX large. \$15 plus \$5 shipping.

Drymonia semicordata - pale yellow flower with pink and red bracts on a 1" cloisonne pin. \$5 includes shipping.

Send check or money order in US funds (payable to The Gesneriad Society) or credit card information to:

> Kathy Spissman 4086 Brownlee Drive Tucker, GA 30084-6113



ADVERTISERS DIRECTORY

Belisle's Violet House20	Lyndon Lyon Greenhouses, Inc20
Dave's Violets37	Mrs Strep Streps37
Kartuz Greenhouses53	Out of Africa37
Lauray of Salisbury43	Pat's Pets37
Logan Nursery37	Violet Barn19

Carolyn Ripps <rippscs@aol.com> Gussie Farrice <f.farrice@verizon.net>

Last year the Seed Fund Chairpersons were invited to Uppsala to judge a flower show organized by the Gesneriasts of Sweden and the Swedish Saintpaulia Society. Gesneriasts is the largest chapter of The Gesneriad Society with hundreds of enthusiastic members and growers. After the judging was completed, we had an opportunity to tour the greenhouses at the Uppsala Botanic Garden which has a fabulous collection of *Saintpaulia* species and cultivars. One of their beautifully grown plants of *Saintpaulia* was awarded Best in Show. (An article about the trip and the show will appear in the next issue of GESNERIADS.)

We sometimes tend to dismiss the genus *Saintpaulia* in favor of the rarer and more exotic members of the family. Would we value "African violets" more if they were hard to find or more difficult to keep alive? This issue of our journal features these most-familiar and well-known members of the family. Many growers were introduced to gesneriads by growing Saintpaulias and then expanded their interest and their collections with the less-familiar genera.

Flowers of the genus *Saintpaulia* are a bit more difficult to pollinate than many gesneriads. The pollen is tightly enclosed within the anthers which must be opened in order to release the pollen. Any of you who have been afflicted with thrips (insects that chew open the pollen sacs) know that loose pollen on your violet blossoms may be a telltale sign of infestation. If you do try your hand at pollinating Saintpaulias, be prepared to wait months for the seed pods to form and ripen. The Seed Fund includes several *Saintpaulia* species, and we always appreciate receiving fresh seed.

Remember to send your seed contributions to Karyn Cichocki (for US donors) and Marilyn Allen (for all other donors). Please do not send seed contributions directly to the Seed Fund Chairs.

Contributions from the following donors are helping the Seed Fund grow: Marilyn Allen, Alison Bilverstone, Ruth Coulson, Jon Dixon, Mike Kartuz, Nancy Kast, Ingrid Lindskog, Leong Tuck Lock, Maureen Mark, Johnnie Rainey, Carolyn Ripps, Olive Ma Robinson, Daniel Steele, and Wallace Wells.

Seed Packets — \$2.00 each

Please

- Make checks payable to the The Gesneriad Society in U.S. funds
- To pay by credit card, send your credit card number, expiration date, and signature, and indicate if the card is Mastercard or Visa (\$6.00 minimum)
- Provide a self-addressed, stamped envelope (non-U.S. orders will have the postage added to their credit card bill)
- List alternate choices
- Include your membership number (first number on your mailing label)

Note

- There is a limit of one seed packet of a single variety per order
- There is a limit of 25 seed packets per order
- There is a household limit of 50 seed packets per calendar year

6 GESNERIADS

Send orders for species seed to: Carolyn Ripps, 21 Sprain Road, Hartsdale, NY 10530

Seed Fund - Species

Achimenes (D)	• gemella
admirabilis (propagules)	• hamosa (F,M)
cettoana (B)	involucrata (F,L)
erecta (B)	• involucrata (dark blue)
erecta 'Tiny Red' (F,L)	lavandulacea (LM)
• grandiflora 'Robert Dressler' (B)	• longgangensis
longiflora (B)	• <i>lutea</i> (formerly <i>C. eburnea</i> yellow)
Aeschynanthus (B)	(F,R)
batakiorum	micromusa (F,L)
 boschianus 	• pumila (F,L)
evrardii	• pumila USBRG2000-18 (F,LM)
fecundus SEL1974-2907-A	• sericea (L,R)
fulgens USBRG82-271	• spadiciformis (L,R)
• garrettii (B)	• subrhomboidea (F,R,L)
gracilis 'Pagoda Roof'	tamiana USBRG98-080 (F,R,P)
humilis USBRG94-214	• viola
hosseusii	 species (Thailand)
lobbianus 'Radicans' (B)	 species (blue) from Phuket
longicalyx	Chrysothemis (F,LM)
longiflorus	friedrichsthaliana
parvifolius (B)	 pulchella (Ecuador)
sp. MSBG87-162	villosa
 sp. Mt. Batupasak HW12587 	Codonanthe (B)
sp. (red) / Philippines (B)	crassifolia
• sp. (like slender <i>longicalyx</i>)	crassifolia 'Cranberry'
Agalmyla	devosiana (digna)
• parasitica HW12714/Mt. Salak (B)	devosiana (digna 'Moonlight')
Alsobia (B)	devosiana (paula)
dianthiflora	devosiana (pink) MP0018
Amalophyllon	devosiana SEL 1997-0120A
• sp. RM2006-1/Belize (D,H,L)	gracilis
Anodiscus (see Gloxinia)	gracilis 'Kautsky Red Leaf' MP0016
Besleria	• venosa
comosa JLC9931 (T) laxiflora GRF9675 (M)	Codonanthopsis
melancholica (MT)	• dissimulata JLC9548 Columnea (B)
cf. divaricata JLC5629	ambigua (Trichantha) 'El Yunque'
sp. GRF9783 (orange w/yellow base)	WEK96163
sp. GRF9703 (Grange wyenow base)	angustata (Pentadenia)
sp. GRF97141 (orange)	arguta
sp. GRF9853 (yellow)	brenneri JLC9833
sp. GRF98139 (orange)	byrsina (Pentadenia) (L)
• sp. JLC5705	citriflora (Trichantha citrina)
• sp. JLC6113	crassicaulis (Pentadenia)
Boea	crassifolia
• hygroscopica	• dodsonii
Briggsia (A,R)	eburnea (Dalbergaria)
• aurantiaca	erythrophaea
muscicola	fawcettii
• species #2	• filamentosa (Trichantha filifera)
Chirita	JLC6500 \
caliginosa (LM)	flexiflora (Trichantha dodsonii) (LM)
flavimaculata USBRG94-085 (R)	glicensteinii

hirta	serrulata GRF9752
• inaequilatera (Dalbergaria) JLC6072	strigosa (B)
• linearis	strigosa GRF1912
maculata	• cf. ecuadorensis JLC6185
nicaraguensis CR92F16	• sp. aff. teuscheri JLC6119
nicaraguensis GRF94105	(Alloplectus)
• oerstediana	sp. (umecta ined.) (B)
orientandina (Pentadenia) (LM)	Episcia (H,L,B,F)
	• xantha
ornata (Dalbergaria) GRF2665	Epithema
oxyphylla	▲
polyantha (Dalbergaria)	sp./N. Perak (M)
purpusii	Gasteranthus
sanguinea (Dalbergaria)	• atratus
sanguinea (Dalbergaria) 'Orange	• calcaratus JLC9867
King' GRF9492	• villosus JLC9620
scandens var. fendleri	• wendlandianus JLC9868 (H,M)
schiedeana	Gesneria (H,F)
spathulata (Pentadenia) GRF9503	acaulis (M)
(LM)	christii
spathulata (Pentadenia microsepala)	citrina
W1837	• cuneifolia (L)
spathulata (Pentadenia zapotalana)	• cuneifolia 'Quebradillas' (L)
strigosa (Pentadenia) GRF95154	cuneifolia 'Tom Talpey' (H,F,L)
sulfurea	humilis
• tandapiana	pedunculosa USBRG97-102 (S,T)
Corytoplectus	• rupincola
cutucuensis (L)	ventricosa (M)
cutucuensis GRF9794	Glossoloma (Alloplectus)
speciosus JLC9969	bolivianum USBRG95-140 (M)
Crantzia	ichthyoderma JLC9836 (T)
tigrina	sp. aff. panamense GRF9781
Cyrtandra	(orange)
cupulata (G,H,MT)	sp. aff. purpureum USBRG98-030
• sp. (white) /Java (T)	sp. aff. schultzei GRF97103
Dalbergaria (see Columnea)	Gloxinella (Gloxinia) (D)
Diastema (D,F,P)	lindeniana (F,L)
affine JLC9964	Gloxinia (D)
racemiferum JLC9824	perennis (LM)
vexans	perennis 'Insignis' (L)
Didissandra	xanthophylla (Anodiscus) (M)
• frutescens (H,M)	Gloxiniopsis (Gloxinia) (D)
Didymocarpus	racemosa (L)
• cordatus (G,T)	Haberlea (A,R)
• sulfureus	rhodopensis
Drymonia	Hemiboea (D)
affinis GRF98109	• strigosa
chiribogana	subcapitata (L)
coccinea GRF9873	Henckelia
coccinea JLC9980 (T)	• albomarginata (H)
coccinea var. fusco-maculatus	• hispida (H)
doratostyla GRF9674 (B)	• incana (H,P)
ecuadorensis 'Red Elegance' (LM)	• malayana (H,M)
hoppii JLC9863	• sp. LTL0406 (LM,R)
·	
macrophylla (M)	Heppiella (D)
mortoniana (L)	
	Heppiella (D)
mortoniana (L)	Heppiella (D) ulmifolia GRF98172

8 GESNERIADS

peruviana	lavender
spicata (M)	pink
Monopyle	• clone G
macrocarpa GRF94123	Rhynchoglossum (H,L)
Moussonia (M)	gardneri
deppeana	Rhytidophyllum (G,H,S,T)
• elegans	auriculatum
 elegans GRF9407 	tomentosum
Napeanthus	villosulum
• primulifolius	Ridleyandra
Nautilocalyx	• morganii
adenosiphon	 quercifolia
• mellitifolius	<i>Rufodorsia</i> (F,LM)
Nematanthus	• minor
albus (sp. "Santa Teresa") (B)	Saintpaulia (F,R)
australis (B)	3. shumensis
 brasiliensis 	 5a. cl. grandifolia No. 299
fissus GRF9938	5b. cl. difficilis Mather No. 2
• fluminensis	• 5b. cl. <i>grotei</i> Protzen
fornix	• 5c2. cl. diplotricha Punter No. 7
• fritschii	• 5f. cl. <i>orbicularis</i>
• punctatus MP0052	• 5h. cl. <i>velutina</i>
• sericeus (B)	• 8. rupicola cl. Cha Simba
• strigillosus 'Ibitioca' (B)	Seemannia (Gloxinia) (D)
wettsteinii (B)	• purpurascens (Bolivia) (M)
Neomortonia	gymnostoma (LM)
nummularia	sylvatica GRF9943 (Brazil)
Nomopyle	sylvatica USBRG94-002 (Bolivia)
• dodsonii (Gloxinia) JLC9645	Sinningia (D)
Orchadocarpa	aggregata (M)
• lilacina	aghensis (T)
Ornithoboea	aghensis AC2356
wildeana (LM)	allagophylla (MT)
Paraboea	allagophylla GRF9922
• capitata	allagophylla GRF9929
• sp. (green leaf)	allagophylla GRF9968
Paliavana (S,T)	allagophylla (yellow)
prasinata	• amambayensis (L)
prasinata GRF732	• araneosa (F,L)
• plumerioides (Cabral)	brasiliensis (M)
tenuiflora	brasiliensis 'Verde'
Paradrymonia	brasiliensis AC1314
• ciliosa	bulbosa (T)
decurrens (L)	calcaria MP891 (F,L)
• sp. JLC5731 (F,P)	canescens (D,LM)
Pearcea Pearcea	carangolensis (M)
sprucei JLC9962 (H,M)	cardinalis (F,LM)
Pentadenia (see Columnea)	cardinalis (compact) (F,LM)
Petrocosmea	cardinalis (dark calyx) (LM)
• sp. (formerly <i>duclouxii</i>)	• cardinalis (orange)
Phinaea (D,F,P)	cardinalis (pink)
albolineata	cardinalis 'Innocent'
divaricata	• cardinalis 'Skydiver' (LM)
multiflora 'Tracery'	cochlearis
Ramonda (A,R)	conspicua (F,L)
• myconi	conspicua (F,E) conspicua GRF 9942
myconi —	cooperi (LM)
white	cooperi (LM) cooperi AC1522 (M)
WILLE	Coopert AC1322 (M)

curtiflora (T) sulcata (LM) curtiflora GRF9927 tubiflora (S,MT) defoliata tuberosa douglasii GRF91188 (LM) warmingii (T) douglasii GRF9936 (LM) warmingii GRF9921 elatior AC1409 (M) sp. aff. aggregata (yellow) (M) elatior GRF9963 • sp. aff. reitzii 'Black Hill' (M) eumorpha /Saltao (L) sp. aff. reitzii GRF9914 (magenta) eumorpha (lavender) (F,L) sp. aff. warmingii from Ilhabela eumorpha (pink) MP631 sp. "Esmeril" (L)
sp. "Florianopolis" (L,M)
sp. "Gertiana" eumorpha (white) gigantifolia glazioviana (L) sp. "Globulosa" guttata (LM) harleyi MP 482 • sp. "Ibitioca" (LM) sp. "Rio das Pedras" MP1094 (F,P) sp. "Rio das Pedras" dark (F,P) sp. "Rio das Pedras" (light) (F,P) hatschbachii (L) hatschbachii 'Iporanga' (D,LM) hirsuta sp. "Santa Teresa" (D,P,F) iarae (F,L) • sp. "Waechter" (LM) incarnata (S,MT) insularis (LM) mixed species Smithiantha (D,FM)) leopoldii (F,L) leucotricha (F,L) canarina GRF9105 multiflora GRF9121 leucotricha (pink) leucotricha cv. 'Max Dekking' (M) multiflora GRF9122 lineata (LM) zebrina GRF9104 lineata GRF9920 (LM) Streptocarpus lineata (highly spotted) buchananii (B) candidus (F,R) lindleyi macrophylla confusus (U) macropoda (M) · confusus ssp. confusus /Swaziland macrostachya (LM) cooksonii (dark purple) magnifica GRF91121 (pink) (LM) cooperi (U) magnifica GRF91134 (red) cyanandrus (F,P) • mauroana (D,M) cyaneus (blue) (R) cyaneus (blue/long corolla) micans MP891 (LM) nivalis AC1460 (L) • cyaneus (lilac) nordestina daviesii (F,U) piresiana (L) denticulatus (U) pusilla (F,P) dunnii (U) • pusilla (Itaoca) (F,P) eylesii (U) • *pusilla* 'White Sprite' (F,P) fanniniae (R) fasciatus (R) reitzii (M) reitzii 'New Zealand' fasciatus /Krokodilpoort, sceptrum (T) E. Transvaal (R) sceptrum AC2406 (T) floribundus (R) sellovii (MT) formosus (R) sellovii GRF9919 formosus /E. Cape, Transkei sellovii 'Bolivia' USBRG96-003 gardenii (F,L) · sellovii 'Purple Rain' glandulosissimus • speciosa 'Cabo Frio' (F,L) goetzei (U) speciosa 'Carangola' grandis (U) speciosa 'Domingos Martins' grandis (blue form) speciosa 'Lavender Queen' grandis ssp. grandis speciosa 'Regina' haygarthii (F,U) speciosa 'Sao Conrado' haygarthii JT04-03D/Transkei Coast speciosa AC1652 (F,U) speciosa AC1503 haygarthii JT04-051/Inchanga (U)

10 GESNERIADS

haygarthii /Mkambati, Transkei (U) holstii (B,L) johannis (F,R) johannis /Komga, E. Cape *johannis* /Weza, S. Natal (R) sp. aff. johannis (F,R) kentaniensis

• kentaniensis (N. Kei River) kirkii (F,L)

kunhardtii

• lilliputana

• meyeri /SE Transvaal (R) meyeri /NE Cape Province modestus (R)

• modestus /Magwa Falls, Transkei (R) muscosus (L) nobilis (M) pallidiflorus (F,LM) parviflorus (R) parviflorus (mauve)

• parviflorus (white) (R) parviflorus (white/mauve)

 parviflorus ssp. parviflorus /Limpopo Province

pentherianus (F,L) polyanthus (F,L) polyanthus subsp. comptonii polyanthus subsp. dracomontanus polyanthus subsp. polyanthus polyanthus subsp. polyanthus /lg fl polyanthus subsp. polyanthus /Valley of 1000 Hills, Natal

porphyrostachys (U) primulifolius (F,R)

primulifolius /Valley of 1000 Hills prolixus (F,U) pumilus (F,P)

• pusillus JT04-02C (P) rexii (F,L,R) rexii (white) rexii (pale blue/long corolla)

rexii (white/blue mix)

rimicola (F,P) roseoalbus (F,R) saundersii (U)

saxorum (B) thompsonii (B,L)

trabeculatus (U) vandeleurii (Ü)

variabilis (F,R) wendlandii (U) wilmsii (U)

wilmsii /Long Tom Pass (U)

Titanotrichum

oldhamii (propagules)

Tremacron aurantiacum (R)

Trichantha (see Columnea)

Vanhouttea (S,T)

 brueggeri lanata

pendula

Mixed alpine gesneriads Mixed gesneriad species

 Limited quantities available. Packet may contain small amount of seed

Seed Fund Key

- (A) Alpine or cool greenhouse
- (B) Suitable for hanging basket
- Has dormant period, forming (D) tubers or rhizomes
- (F) Blooms readily in fluorescent light
- (G) Recommended for greenhouses; requires space
- (H) Requires humidity and warmth
- (L) Low growing; not more than 12"

- (LM) Low to medium height
- (M) Medium height; 1 to 2 feet
- (MT) Medium to tall
- (P) Petite or miniature: under 6"
- (R) Rosette in form
- Requires sun to bloom (S)
- Tall plants; generally over 3 feet (T)
- (U) Unifoliate or single leaf
- (V) Leaves may be variegated

Seed Fund Donations

Please follow these instructions for mailing seed donations:

Donations mailed from anywhere in the United States should be sent to:

> Karyn Cichocki 79 Beaver Run Road Lafayette, NJ 07848

Donations from outside the U.S.A. (Canada and other international locations) should be sent to:

Marilyn Allen 8 Brackenridge Place Port Moody, BC, Canada V3H 4G4

The Genus Saintpaulia

Laurence E. Skog & Jeanne Katzenstein

Commonly called African violets, Saintpaulias are certainly the most widely cultivated gesneriads and arguably the most popular flowering house-plant worldwide. There are nine quite-similar species of this popular gesneriad from East Africa, all with flowers in the purple-blue-white range. The numerous showy cultivars available provide larger flowers, greater color range, and more unusual foliage types than the species.

Establishment of the Genus: Saintpaulia H. Wendl., Gartenflora, 42: 321, pl. 1391 (1893).



Saintpaulia ionantha first published in 1893 in Gartenflora, 42: 321, pl. 1391 (image courtesy of Anton Weber)

Etymology (history of the word): Named after the family name of Ulrich (father) and Walter (son) von Saint Paul-Illaire. Walter (1860-1910) discovered the plant in 1892 in the Usambara Mountains in the East African country of Tanzania.

Placement of the Genus: Family Gesneriaceae, subfamily Cyrtandroideae, Tribe Didymocarpeae.

Geographical Distribution: The genus is remarkably restricted to East Africa (SE Kenya and N Tanzania). The Usambara Mountains in Tanzania is the area richest in *Saintpaulia* species. (see map on p 38)

Habitat: Plants of *Saintpaulia* are found in hill and mountain forests, usually growing on moist rocks, on slopes, or on stream sides.



Saintpaulia ionantha growing at Amboni caves in Tanga, Tanzania



Saintpaulia ionantha ssp. grotei near Mlinga peak in Tanzania with seedlings sprouting in the moss-covered earth below

Photographed *in situ* by Johanna Kolehmeinen during her field work and studies on the ecology, population genetics and conservation of the African violet. For more information about this project in Tanzania launched by the Finnish Saintpaulia Society in 2003, visit their website <www.saintpaulia.fi/projekti_stp_eng.htm>

Habit: *Saintpaulia* species are perennial herbs with a rosette or trailing habit. The stem is either short and thick or procumbent, with distinct internodes rooting at the nodes. The leaves are opposite or alternate, petiolate, more or less fleshy; the blade is suborbicular to elliptic in shape. The 2-many flowers are arranged in cymes from the upper leaf axils. The flowers have 5 narrow, erect and equal calyx lobes and a corolla with a very short tube and a flat or nearly flat face with a 2-lipped limb of 5 large and rounded lobes. The upper lip is 2-lobed and somewhat smaller than the 3-lobed lower lip. There are only 2 stamens (sometimes 4 appear in cultivars) that stick up slightly from the corolla tube, and bear yellow anthers. The ovary is superior and the style is exserted. The capsule fruit is ovoid to linear-cylindric which eventually dehisces to expose tiny brown seeds.

Cultivated plants now range in size from miniatures, comfortable in a twoinch pot, to standards whose leaf span would cover a large dinner plate or more. Plants can be flat rosettes or trailing. Leaves may be plain green, redbacked, or with many types of variegation. Flowers may be single or double, violet- or star-shaped or even bell-shaped, with a color range that has expanded from the original "every shade of blue" to include pink, red, coral, green, white, and now even yellow.

Pollinators: The flat-faced, deep violet-blue, white or bicolored blue-white corollas with exposed, bright-yellow anthers exhibit the typical pollination syndrome known as buzz pollination where pollen is released by vibratory movement of the pollinator (bee). The robust anther walls continue to attract insects after the pollen is shed, thus the flowers are deceptive to some extent.

Chromosome number: 2n = 30, 60 (the latter only in cultivars).

Number of Species: 9, with one species, *S. ionantha*, divided into 8 subspecies and one subspecies divided into 2 varieties. (More information on the species, subspecies, varieties and clones will appear in the next issue.)

Type Species: Saintpaulia ionantha H. Wendl.

Currently recognized Saintpaulia Species:

Saintpaulia brevipilosa B.L. Burtt 1964. Notes Roy. Bot. Gard. Edinburgh 25: 193. Collected by Punter in 1959 from the Nguru Mountains in Tanzania.

Saintpaulia goetzeana Engler 1900. Bot. Jahrb. Syst. 28: 481, pl. 6. Collected by W. Goetze in 1898 from the Uluguru Mountains in Tanzania at elevations of 1300-2000 m as a creeping herb on mossy rock surfaces in deep shade in upland rainforests.

Saintpaulia inconspicua B.L. Burtt 1958. Notes Roy. Bot. Gard. Edinburgh 22: 557. First recorded in 1934 from the Uluguru Mountains in Tanzania by E.M. Bruce, found at an elevation of 1370 m on moist soil in the forest.

Saintpaulia ionantha H. Wendl. 1893. Gartenflora 42: 321, pl. 1391, fig. 66. Collected in several places in Tanzania, but usually found near sea level or at other lowland sites.

Saintpaulia nitida B.L. Burtt 1958. Notes Roy. Bot. Gard. Edinburgh 22: 564. Collected in 1953 in the Nguru Mountains of Tanzania by Drummond and Hemsley as well as others. Plants grow by forest streams on shady rocks at about 1000 m.

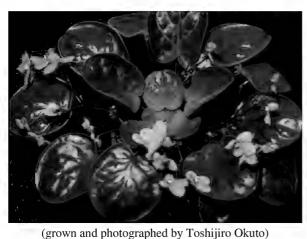


Saintpaulia brevipilosa

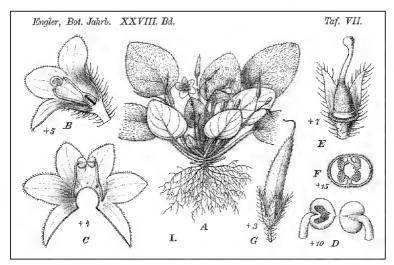
(grown at Royal Botanic Garden, Edinburgh; photo by Michael Möller)



(grown by Maryjane Evans; photo by John Evans)



Saintpaulia nitida



Saintpaulia pusilla first published in 1900 in Bot. Jahrb. Syst. 28: 481, pl. 7. (image courtesy of Anton Weber)

Saintpaulia pusilla Engler 1900. Bot. Jahrb. Syst. 28: 481, pl. 7. Reported from a number of locations from the Uluguru Mountains in Tanzania growing at elevations of 1200-1800 m.

Saintpaulia rupicola B.L. Burtt 1964. Notes Roy. Bot. Gard. Edinburgh 25: 193. Collected about 25 miles NW of Mombasa, Kenya by R.D. Bayliss and sent to Edinburgh by W.R. Punter. Plants typically found growing in crevices of bare rocks in the wild (see photo on page 18).

Saintpaulia shumensis B.L. Burtt 1955. Notes Roy. Bot. Gard. Edinburgh 21: 238. Collected by P.J. Greenway in 1947 from the West Usambaras Mountains near Shume, Tanzania growing from 1900-1950 m. Also reported on Nilo Peak in the East Usambara Mountains and in the Nguru Mountains.

Saintpaulia teitensis B.L. Burtt 1958. Notes Roy. Bot. Gard. Edinburgh 22: 559. First collected in the Teita (or Taita) Hills, Kenya, in 1938.

Earliest Illustrations: *Saintpaulia ionantha* H. Wendl., Gartenflora 42, pl. 1391 & fig. 66 (1893); *Saintpaulia goetzeana* Engl., Bot. Jahrb. Syst. 28, pl. 6 (1900).

Common name: African violet.

Cultivation: Most *Saintpaulia* species are in cultivation. Additional recent collections of geographic variants have provided new material for the devotee of species. The usual growth habit is a flat rosette, but there are also trailing forms. In cultivation, the species tend to be more fastidious than the fancy cultivars, requiring cooler temperatures, higher humidity, and a grower with a greener thumb.

African violets are ideal, ever-blooming houseplants that enjoy the warm temperatures found in most homes. They do best with indirect sun or fluorescent light. They are easy to propagate from a leaf or a crown (sucker or offset).



Saintpaulia rupicola

(grown at RBGE; photo by Michael Möller)





(grown at RBGE; photo by Michael Möller)



Saintpaulia teitensis

(grown and photographed by Toshijiro Okuto)

Notes: The classification of the species of *Saintpaulia* has undergone a seachange in recent years with the introduction of molecular studies combined with morphology showing that many well known species are simply ecological variants in the wild with many intermediates. This has resulted in a severe reduction in the number of species after many years of stability. Darbyshire (2006) reduced the species to 6. But following the studies by J.F. Smith (see p. 38) we agree with him and others that there are probably 9 recognizable species. Further studies (Smith et al. 1998) have demonstrated that *Saintpaulia* is likely derived or evolved from within *Streptocarpus* subgenus *Streptocarpella*. However, because the floral morphology (probably resulting from specialization to pollinators) of *Saintpaulia* is easily distinguished from that in *Streptocarpus*, the genus remains separated.

Selected References:

Darbyshire, I. 2006. 4. Saintpaulia, pages 50-72. In: H.J. Beentje and S.A. Ghazanfar, eds., Flora of Tropical East Africa. Kew, U.K.: Royal Botanic Gardens, Kew.

Skog, L.E. and J.K. Boggan. 2005. World checklist of Gesneriaceae. URL: http://botany.si.edu/gesneriaceae/checklist/

Smith, J.F., M. Kresge, M. Möller, and Q.C. Cronk. 1998. The African violets (Saintpaulia) are members of Streptocarpus subgenus Streptocarpella (Gesneriaceae): Combined evidence from chloroplast and nuclear ribosomal genes. Edinburgh Journal of Botany 55: 1-11.

Weber, A. and L.E. Skog. 2003. Genera of Gesneriaceae. URL: http://www.genera-gesneriaceae.at/genera/saintpaulia.htm



Saintpaulia rupicola growing in a small crevice on a rock in Kenya (photo courtesy of Royal Botanic Garden, Edinburgh)

Coming in our next issue ...

more about the genus *Saintpaulia* including photos of award-winning species from various flower shows and numerous articles about how to grow them.



Typical forest area in East Africa with Saintpaulia plants growing on a large rock near a stream (seen here with Dirk Bellstedt from Stellenbosch University, South Africa)

™VIOLET BARN

Home of Rob's Violets

Shipping quality plants since 1985.

Gesneriads too!!

Our own 'Bristol's' strep hybrids and MANY other genera in the family

10 different streps, our choice \$30 Add \$12 per order for shipping

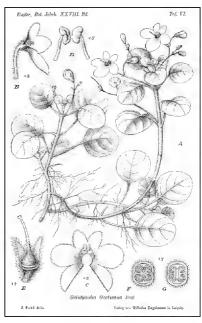
We'll ship to <u>anywhere</u> at <u>anytime</u> (Ask us about winter delivery)

SAFE DELIVERY GUARANTEED!

FOR FULL-COLOR CATALOG, SEND \$2

WWW.VIOLETBARN.COM

PO BOX 696, NAPLES, NY 14512 PHONE: 585-374-6947



Saintpaulia goetzeana illustrated in Bot Jahrb. Syst. 28: 481, pl. 6 (1900) (image courtesy of A. Weber)

Gesneriad Society Publications

Back Issues
Back Issues, GESNERIADS (2006-2008), per issue
Back Issues, THE GLOXINIAN (2004-2005), per issue
Back Issues, THE GLOXINIAN (1996-2003), per issue\$5
CD ROM's
THE GLOXINIAN 2005 (all 4 issues plus all photos in high resolution) \$10
GESNERIADS 2006 (all 4 issues plus all photos in high resolution)
GESNERIADS 2007 (all 4 issues plus all photos in high resolution)
GESNERIADS 2008 (all 4 issues plus all photos in high resolution)
Gesneriads in the Wild (PowerPoint presentation with audio narration) \$10
Gesneriad Screensaver 2004 (hundreds of images)
Alpine Gesneriads (PowerPoint plus 100 high-resolution images) \$10
Convention 2006 (5 PowerPoint presentations plus hundreds of images) \$15
Convention 2007 (9 PowerPoint presentations plus hundreds of images) \$15
Convention 2008 (11 PowerPoint presentations plus hundreds of images) \$15
How to Know and Grow Gesneriads
Achimenes Register 2008\$8
(all prices include postage)
Gesneriad Society Publications, 1122 East Pike Street, PMB 637, Seattle, WA 98122
For full listing and online ordering visit: www.gesneriadsociety.org

Lyndon Lyon Greenhouses, Inc.

14 Mutchler Street Dept. GX Dolgeville NY 13329

Place of origin of World Famous

African Violets — Columneas — Episcias — Streptocarpus — Sinningias

We also carry: Aeschynanthus — Chiritas — Rex Begonias — Orchids and many other exotic bouseplants!

Open Daily: M-F 8AM - 4PM Sat: 10-4 / Sun: CALL! Phone: (315) 429-8291 Visit us at: www.lyndonlyon.com or send \$3.00 for Catalog We also carry Supplies!

Belisle's

Catalog \$2.00

Marcia Belisle P.O. Box 111 Radisson, WI 54867 Heirloom Violets Choice Gesneriads Unusual Houseplants

belislesviolethouse@yahoo.com

GEMS of the National Capital Area

Lee Linett Local Convention Co-Chair

Francis Preston Blair was horseback riding one day in the woods where Georgia Avenue is now. His horse threw him, and he landed close to a stream that appeared silver. In 1842, Blair bought 1,000 acres surrounding that stream, built a mansion there and called it Silver Spring.

Gems come in all sizes, shapes and descriptions: gesneriads, the gems of our plant collections; a gem of an idea; a gem of a person; a gem of an attraction.

Some gems are large like the Smithsonian Institution's museums while others are smaller, unusual, or unique. Crafts people can pop into the Bead Museum for a worldwide view of adornments; crafty folks can check out a real Enigma at the Cryptological Museum; craftier ones could cater to their clandestine leanings at the International Spy Museum or investigate the F.B.I. Building.

Stamp collectors can multitask at the Postal Museum and submit their designs for a duck stamp. Adventurers, do take the opportunity to explore the National Geographic's building and would-be media personalities, anchor your own TV program at the Newseum. Closer to the hotel in Silver Spring, see what makes the Discovery Channel so interesting. You can't miss it; it's the building with the dinosaur in the lobby. Order up some food delivered to your really comfortable seat in the Silver Theater at the American Film Institute and enjoy classic films of every genre.

Visit an embassy to view art not usually housed in a museum or enjoy the Hirschorn's outdoor sculpture garden. Drop in at the Torpedo Factory (refitted from its original use) in Alexandria to see multimedia art as it is created.

Admire the aardvarks and armadillos or just give in to the "pandamonium" at the National Zoo, then stroll through a tropical rain forest. Intrigued by insects? Then the Insect Room at the Smithsonian's Museum of Natural History is a must-see, especially at feeding time. Matilda is quick, so don't blink.

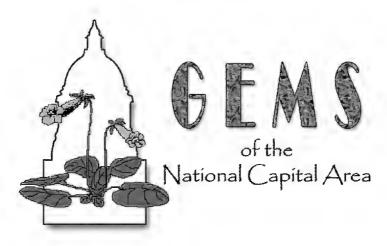
Within a short distance of the hotel, you can climb aboard the non-GPS modes of transportation at the Trolley Museum, walk trails of plantings (including conservatories) on 55 acres at Brookside Gardens, or sample a variety of cuisines: Thai, Moroccan, Salvadorian, Burmese, Jamaican, Indian, Ethiopian, Mexican, Chinese, Italian, Continental; as well as seafood, deli, and the usual chains.

There are so many places to visit that will please every taste, so plan some extra time either before or after the convention to experience them at your leisure. Wear comfortable shoes and light clothing. We hope you enjoy the gems you discover.

Recently, Washington was voted the #1 city for history and art. A tourmobile ride will give you 3-1/2 hours of sights; however, you can get off at any stop to spend some time and re-board later.

Oh, wait. Did I mention the Hope Diamond? That's a nice gem. Then there's Well, you'll see when you get here!

If you register early, you'll be able to get into the plant sales room early and you'll want to because we expect to have a large selection from which to choose; our Plant Sales Chair, Carol Hamelink, is an excellent grower as is Jim Roberts, our Flower Show Chair. Both will be making extra efforts, along with other growers, to keep you coming back for more ... especially after you attend the great lectures that Ron Myhr has scheduled. Petrocosmeas and Chiritas are the "hotties" right now and, yes, we'll have a good representation, including hybrids. Mauro's Sinningias, of course, and Silvana ... well, we'll keep a few surprises, so you'll have to be there.



Convention Auction

Live or silent, we know that you will enjoy bidding and winning at this year's auction. In 2008 we again auctioned off "specialist" Jon Dixon to show the lucky winner around the plant sales room before the official opening. Jon will be escorting Kathy Spissman around the sales room in Silver Spring, as he did last year in Denver. It's round two for Kathy! Will you be his partner in 2010?

If you plan on making an auction donation, complete the auction form that you will receive with your registration packet and have it with you when you bring your items to the auction area on Thursday afternoon. Bring us some of your own gems as auction donations and join the fun.

> Paul Susi, Development Chair Suzie Larouche, Auction Chair

Improved Online Registration is Available

The online registration process has been streamlined and we hope that you will use it to register for convention. Go to www.gesneriadsociety.org and click on "Register Now".

The Gesneriad Society 53rd Annual Convention Chairpersons

Convention Paul Susi (347-809-4447)

<convention@gesneriadsociety.org>
117-01 Park Lane South, Apt C1A

Kew Gardens, NY 11418

Convention Coordinator Jeanne Katzenstein < jkatzenste@aol.com>

Convention Registrar

Bob Clark <conventionregistration@gmail.com>

Awards

Jo Anne Martinez <awards@gesneriadsociety.org>

Development Committee/Auction Suzie Larouche
Shows & Judging Ben Paternoster

Local Convention Chair Nell Hennessy (202-558-5141)

<nell.hennessy@fiduciarycounselors.com>

Local Convention Co-Chair Lee Linett

<conf09-lee@nationalcapitalgesneriads.org> 3905 Queen Mary Dr., Olney, MD 20832

Artwork & Pamphlet Wendy Williamson

Convention Packet Laurene Jones

Hospitality Naomi Pitts

Plant Sales Carol Hamelink hamelinkc@yahoo.com

Publicity Aarti Shah
Speakers Ron Myhr
Special Events & Transportation Mike Cagley
Table Favors Quentin Schl

Table Favors Quentin Schlieder

Treasurer Larry Skog
Volunteers M.J. Tyler

Flower Show Chair Jim Roberts <jim-roberts@hughes.net>

Artistic & Show Schedule Lee Linett
Artistic Reservations Frank Daspit

Classification & Plant Inspection Bob & Dee Stewart Educational & Commercial Elizabeth Varley

Entries Jim Christ

Judges & Clerks Michael Riley

PlacementBeverly NissenbaumPlant MaintenanceDenise Whitman

Staging Brian Connor

The Gesneriad Society 53rd Annual Convention

Tuesday, June 30, to Saturday, July 4, 2009 Convention Registration Form

Please print:

Mail to Convention Registrar: Bob Clark

1122 E. Pike St., PMB 637, Seattle, WA 98122-3916

Or register online at <www.gesneriadsociety.org>
Email inquiries to <conventionregistration@gmail.com>

(will appear on name badge(s) as printed here) Address _____ City _____ State/Prov _____ Country ____ Zip/Post Code _____ Phone ____ E-mail _____ Membership # (top line of current mailing label) Category: ☐ Individual ☐ Family ☐ Sustaining ☐ Research ☐ Life ☐ Attending my first Gesneriad Society Convention ☐ Commercial (nursery/greenhouse name) Date arriving at hotel: _____ Date leaving hotel: _____ Special diet needs (check box and/or specify below) ☐ Diabetic ☐ Allergic to shellfish ☐ Allergic to peanuts \square Vegetarian specify if will also eat \square chicken \square fish ☐ Other Will you volunteer a few hours of your time to help with staffing during convention? (You will be contacted by the volunteer coordinator regarding specific days/times) \square Host at Registration Table \square Assist with Plant Sales ☐ Host at Flower Show ☐ Take meal tickets / Distribute table favors All registrations must be postmarked by June 1, 2009. After that date, registrations will be accepted on a space-available basis and will be charged a late fee of \$45. Early registrations (those postmarked by April 1, 2009) will entitle a registrant to a copy of the convention lecture CD for just the postage and handling cost. The CD will be mailed in late 2009. Registration includes all lectures except the Judging School, for which there is a separate fee. Early admission to plant sales will be in registration number order. \square in honor of \square in memory of ☐ Convention t-shirt (specify quantity for each color and size below) _____ @ \$10 = \$_____ ___ Lime Green (M, L, XL) ___ Lavender (M, L, XL) ___ Fuchsia (M, L, XL) \square Early Registrant Lecture CD (register by 4/1/09) @ \$ 5 = \$_____ Late Charge (if postmarked after June 1, 2009) @ \$45 = \$_____

Event	No.	Cost \$US	Total
Primary Registrant (including packet)	(6	\$50 =	\$
Guest or Family: spouse/children (including packet)			
Guest or Family: spouse/children (badge only)			
Wednesday, July 1, Opening Breakfast			
Egg Beaters, mushrooms, scallions, fresh fruit and low fat yogurt; or Scrambled eggs,hash browns, smoked bacon, fresh fruit			T
Reg #1: ☐ Egg Beaters ☐ Scrambled Eggs Reg #2: ☐ Egg Beaters ☐ Scrambled Eggs			
	6	\$10 -	\$
Wednesday , July 1, Judging School (<i>select one per registrant</i>) Additional fee for materials if design workshop selected	@	\$10 = \$10	\$ \$
Reg #1: ☐ Novice ☐ Intermediate/Advanced ☐ Workshop		Ψ.Ο	Ψ
Reg #2: ☐ Novice ☐ Intermediate/Advanced ☐ Workshop			
Other Registrants (specify):			
Wednesday, July 1, Buffet Dinner	@	\$39 =	\$
Thursday , July 2 (select either Trip A or B for each registrant) (<i>Trip A includes lunch sandwich with apple, chips, cookie and water</i>)			
Reg #1: Trip A: Botanic Garden/lunch/Arboretum			\$
Lunch: ☐ Roast Beef ☐ Smoked Turkey Breast ☐ Grilled V			
☐ Trip B: Botanic Garden/DC highlights tour			
Reg #2: ☐ Trip A: Botanic Garden/lunch/Arboretum			\$
Lunch: ☐ Roast Beef ☐ Smoked Turkey Breast ☐ Grilled V			ф
☐ Trip B: Botanic Garden/DC highlights tour	@	\$23 =	\$
Other Registrants (specify):		. 000	ф
Friday, July 3, Full Breakfast Buffet	@	\$23 =	\$
(breakfast only for judges, clerks and flower show personnel)	G	0.04	¢.
Friday, July 3, Membership Luncheon	n, @	9 \$24 =	\$
Reg #1: ☐ Tuna Salad ☐ Deli			
Reg #2: Tuna Salad Deli	-//[
Friday, July 3, Flower Show Awards Banquet	demi-	\$42 =	\$
Reg #1: ☐ Chicken ☐ Steak ☐ Bass			
Reg #2: ☐ Chicken ☐ Steak ☐ Bass			
Other Registrants (specify):			
Saturday, July 4, Luncheon	e; or Bak d vegetal	ed oles;	\$
Reg #1: □ Chicken □ Salmon □ Pasta Reg #2: □ Chicken □ Salmon □ Pasta Other Registrants (specify):			
Saturday, July 4, "All you can eat" seafood buffet at Phillips			
Seafood Restaurant on the Potomac	@	\$55 =	\$
Total Amount Enclosed			
Make check or money order (payable in US\$ on a US bank) to:			
charge \$to my □ VISA □ MasterCard #			-
Expiration Date Name on card			
Security code (3 digits on back): Signature			

2009 Convention Program

	C
Tuesday, June 30	
10:00 a.m 12:00 noon	Board of Directors Meeting
12:00 noon - 2:45 p.m.	Lunch and Committee Meetings
2:00 p.m 4:00 p.m.	Convention Registration and Information
3:00 p.m 6:00 p.m.	Board of Directors Meeting
6:00 p.m 7:30 p.m.	Convention Registration and Information (Flower Show entry forms accepted)
8:30 p.m 10:00 p.m.	Board of Directors or Committee Meetings (if required)
Wednesday, July 1	
7:15 a.m 8:45 a.m.	Convention Registration and Information (Flower Show entry forms accepted)
7:30 a.m 8:30 a.m.	Convention Opening Breakfast and Welcome by Convention Committee and Gesneriad Society President
8:45 a.m 11:15 a.m.	Judges Training, Session 1: Novice / Intermediate and Advanced / Workshop (pre-registration and Gesneriad Society membership required)
12:15 p.m 2:00 p.m.	Judges Training, Session 2, All Levels
2:15 p.m 3:00 p.m.	Judges Interest Group Meeting
3:15 a.m 4:15 p.m.	Selby Project Update / Conservation Program
4:00 p.m 5:30 p.m.	Convention Registration and Information (Flower Show entry forms accepted)
4:30 p.m 5:30 p.m.	Judges Test
4:30 p.m 5:30 p.m.	Future Conventions Meeting
4:45 p.m 5:30 p.m.	Newsletter Editors Meeting
5:45 p.m 6:30 p.m.	Host Chapter Social
6:30 p.m 7:45 p.m.	Buffet Dinner Honoring Chapters and Members-at-large
8:30 p.m 10:00 p.m.	Gesneriad Hybridizers Association Meeting (open to all) Program: "Creating Smaller Streps"
Thursday, July 2	
8:00 a.m 8:45 a.m.	Convention Registration and Information (final submission of entry forms)
8:45 a.m 9:00 a.m.	Board Buses for Tours (depart at 9:00 a.m. promptly)
9:00 a.m 12:30 p.m.	Visit to US Botanic Garden; DC highlights bus tour
9:00 a.m 2:30 p.m.	Visit to US Botanic Garden, box lunch, and tour of the National Arboretum
2:30 p.m 3:30 p.m.	Convention Registration and Information
3:30 p.m 6:30 p.m.	Flower Show Entries
4:00 p.m 6:00 p.m.	Auction Donations Accepted
6:00 p.m 7:00 p.m.	Convention Registration and Information
7:15 p.m 8:15 p.m.	Chapter Presidents Meeting with Society President and C&A Chair (open to chapter/affiliate presidents or delegates)
8:15 p.m 8:45 p.m.	Sale of Publications and Promotional Items
9:00 p.m 9:30 p.m.	Early Entry Plant Sales (entry by registration number)
9:30 p.m 11:00 p.m.	Plant Sales

Friday, July 3	
6:00 a.m 6:45 a.m.	Flower Show Late Entries (with permission of Show Chair)
7:00 a.m 7:30 a.m.	Breakfast for 2009 Judges, Clerks and Show Personnel only
7:30 a.m 11:00 a.m.	Flower Show Judging
9:00 a.m 11:00 a.m.	Convention Registration and Information
9:00 a.m 11:45 a.m.	Plant, Seed, Promo and Publications sales; Auction viewing
12:00 p.m 1:30 p.m.	Luncheon and Annual Membership Meeting: President Peter Shalit presiding; Awards of Appreciation; Election of Directors
1:45 p.m 5:00 p.m.	Flower Show and Plant Sales open; Auction viewing
2:15 p.m 3:15 p.m.	Lecture #1: "Knowing and Growing the Genus <i>Chirita</i> " by Peter Shalit (Seattle, WA)
3:30 p.m 4:30 p.m.	Lecture #2: "Pollinators and Floral Evolution in Caribbean Gesneriads" by Silvana Martén-Rodríguez (Washington, DC)
6:30 p.m 7:30 p.m.	Cocktail Hour
7:30 p.m 9:15 p.m.	Flower Show Awards Banquet (MC: Ben Paternoster; Awards Chair: Jo Anne Martinez)
9:15 p.m 10:30 p.m.	Flower Show open
Saturday, July 4	
7:00 a.m 8:00 a.m.	Photographers only in Show Room
7:00 a.m 8:00 a.m.	Board of Directors Breakfast Meeting
8:00 a.m 9:00 a.m.	Flower Show Judges Critique (for judges and clerks who participated in the 2009 Flower Show)
8:30 a.m 9:30 a.m.	Convention Registration and Information
9:00 a.m 11:45 a.m.	Auction Viewing
9:00 a.m 12:00 noon	Flower Show and Plant Sales open; Seed, Promo and Publications Sales open
9:15 a.m 10:15 a.m.	Lecture #3: "Knowing and Growing the Genus <i>Petrocosmea</i> " by Tim Tuttle (Pittsburgh, PA)
10:30 a.m 11:30 a.m.	Lecture #4: "Sinningia: Genus Overview and Recent Collections" by Mauro Peixoto (São Paulo, Brazil)
11:45 a.m.	Silent Auction Closes
12:15 p.m 2:00 p.m.	Luncheon Honoring Commercial Growers; Live Auction (Chair: Suzie Larouche)
2:00 p.m 2:45 p.m.	Flower Show open and final Plant Sales
2:00 p.m 4:00 p.m.	Phytosanitary Inspector available
2:15 p.m 3:15 p.m.	Auction Settlement (live and silent)
2:45 p.m 3:00 p.m.	Pick up auction plants from Flower Show
3:00 p.m 4:00 p.m.	Flower Show and Plant Sales breakdown
5:45 p.m 6:00 p.m.	Board Buses for Dinner (depart promptly at 6:00 p.m.)
6:00 p.m 9:45 p.m.	Bus to dinner buffet at Phillips Flagship Restaurant on the DC waterfront

Convention Refund Policy

Requests for refunds made before June 16, 2009 will be honored in full. Requests made between June 17 and June 30, 2009 will be honored to the extent possible, and refunds will be given based on previous commitments made to the hotel, bus, and tour operators. Refunds cannot be guaranteed if requested after June 30, 2009.

Additional Information

Convention 2009 will be held in the National Capital Area. We will be staying at the Hilton Silver Spring, 8727 Colesville Road, Silver Spring, MD 20910, (301) 589-5200. The hotel is located in the heart of Silver Spring, minutes from downtown Washington, DC, on the Metro subway system. Washington was recently rated the #1 place for history and art. There are so many "gems" to visit that you should plan extra time either before or after the Convention to explore Silver Spring and DC.

For information on DC attractions, visit the official DC tourism site on the web http://www.washington.org. For things to see and do around the hotel, check out the Downtown Silver Spring web site http://www.silverspringdowntown.com. Wear comfortable shoes and light clothing. We hope you'll enjoy the gems you discover, as well as the gesneriad gems at the Convention.

Plant Sales Procedures

Register early so you'll get into the plant sales early. You'll want to because we expect to have a large selection from which to choose. Individual donors, chapters (for a great way to raise funds), and vendors are invited to participate in the exciting plant sales event at this year's convention. If you are a donor or a vendor, please make sure that potted plants for sale are well rooted and clearly labeled. Rhizomes, tubers, cuttings, and stolons in labeled plastic bags are also welcome. Individuals, chapters, and vendors putting plants into the sale are expected to volunteer in the sales room for a few hours during convention.

Use one of the following procedures in preparing plants for sale. These procedures will insure that sellers receive full proceeds from their plants, buyers will have the plant name, and the sales process will be efficient.

DONORS: We will greatly appreciate any amount of donated plant material.

- Each plant must be labeled, either with its name printed clearly on a WHITE plant tag that is
 placed securely in the pot, or with a label on the pot. Plastic tags are preferred (please use a complete tag in a pot; do not cut tags into small pieces for labels); paper tags are discouraged.
- 2. You do not need to price your plants in advance. Just bring your donated materials to the plant sales rooms and the sales committee will price them for you.

VENDORS: Each vendor selling plants at convention must bring a minimum of 50 plants.

- 1. Each plant must be labeled, either with its name printed clearly on a WHITE plant tag that is placed securely in the pot, or with a label on the pot. Plastic tags are preferred (please use a complete tag in a pot; do not cut tags into small pieces for labels); paper tags are discouraged.
- 2. The price and seller's identification must be shown on a separate brightly COLORED plant tag. Please advise the plant sales chairperson of the color and identification code you will use.
- 3. Place BOTH tags (name of plant and price/your ID) on the same side of the pot facing out. It will help if the price tag is longer than the name tag.
- 4. Label cuttings, rhizomes, tubers and bagged plants by clearly printing the plant name on the bag or on a WHITE plant tag securely attached to the bag using tape. Alternatively, use a plastic label placed inside the bag. Please do not staple pricing labels on bags holding plant material.
- 5. Price cuttings, rhizomes, tubers and bagged plants by attaching a brightly COLORED tag with the price and seller's identification. Attach the price tag separately from the name tag using tape.

If you plan to donate and/or sell plants at convention, we would appreciate your informing us as early as possible. Please send your name, address, and the ID you will use on your tags to: Carol Hamelink, 13707 Concord Ave, Laurel MD 20707 or email heave plants at the hotel by Thursday morning, July 2. Anyone who foresees getting there later, please notify Carol Hamelink so special arrangements can be made.

Judges Training School

The Training School for the 2009 Convention will be held on Wednesday, July 1. The school consists of two sessions. Session 1 will be held from 8:45 to 11:15 a.m. and Session 2 from 12:15 to 2:00 p.m. The novices will be in a separate class during Session 1. Novices should obtain and study the Flower Show Manual for Judges and Exhibitors from Gesneriad Society Publications. The certified judges who register must indicate their choice of class for Session 1, either Intermediate/Advanced (primarily for judges preparing for the Senior Judge exam) or Workshop on designing a tray landscape (limited to the first 25 who register). Information on the Workshop topic always appears in the January and May issues of *Appraisal*. All registrants are together for Session 2. A member who is primarily interested in exhibiting, and not necessarily becoming a judge, may register for the school. Taking the examination (from 4:00 to 5:00 p.m.) is optional unless accreditation as a judge is desired.

Registration for the school can be accomplished on the same form as registration for Convention. The registration fee is \$10 (plus an additional \$10 materials fee for the Workshop). No registrations will be accepted at Convention. Payment for *Appraisal* subscriptions should be made directly to Jennifer Howland when your subscription is due for renewal. Novice registrants who meet all other requirements for becoming a Student judge must subscribe to *Appraisal* no later than September 30, 2009.

There will be a meeting of the Judges Interest Group on Wednesday, July 1, from 2:15 to 3:00 p.m. Current Gesneriad Society judges or those interested in becoming judges are welcome to attend this meeting. For judges and clerks who participate in the flower show judging, there will be a critique on Saturday, July 4, from 8:00 to 9:00 a.m.

Ben Paternoster, Shows & Judging Chair

 den 9@optonline.net>

A Call for Judges and Clerks

Members who are attending convention and are interested in an assignment as a judge or clerk, please notify Judges Chairperson, Michael Riley, 101 West 104th Street, New York NY 10025 or <Riley2362@aol.com> for consideration. Invitations will be extended individually so please confirm your contact information.

Flower Show Awards

The members of the National Capital Area Chapter are proud to be hosting the 2009 Convention near Washington, DC. For those of you like me who intend to arrive early, DC has many interesting sights. Of course, I am most interested in gesneriads. Jim Roberts, Flower Show Chair, has promised an outstanding show and plant sale filled with great diversity. With the anticipation of such a spectacular show, I need everyone's help.

As Awards Chair, I have the honor of recognizing all the outstanding and beautiful plants and exhibits. The generosity of the individual and commercial members, chapters and friends at large who donate is greatly appreciated by the winning exhibitors, the Society and, most of all, me. With your help, I can recognize every award-winning exhibit. Your past donations have been most wonderful and have made this job enjoyable. I am counting on you again this year.

Please join in the fun and consider donating an award for the 2009 Convention. A member or chapter wishing to donate an award may forward an award to me at the address below. Checks or money orders should be made payable to The Gesneriad Society. Awards may also be made when registering for convention by mail or on the website <www.gesneriadsociety.org>. All awards must be received by June 20.

As in the past, preference is for unspecified awards. This allows for fair distribution to all deserving entries. Special requests will be filled on a first-come basis. If there are no eligible entries, or the category's award has already been filled, the award will be transferred to another class or section (with your permission). Should there be fewer eligible entries than awards, the balance of award donations will be used to sponsor color pictures in our great journal.

THANK YOU to all who have donated in the past. Your generosity has been overwhelming, and I look forward to your continued support. Never donated an award? Become a first-time donor and join the tradition.

Acknowledgment of all award donations will appear on our website and in the fourth quarter issue of Generials. Again, thank you for your past support and for your consideration for this year's convention.

Jo Anne Martinez <4jam@tampabay.rr.com> 809 Taray de Avila, Tampa, FL 33613

The Gesneriad Society Convention Show Schedule "Gems of the National Capital Area"

July 3 and 4, 2009

Entries will be accepted on Thursday, July 2, from 3:30 p.m. to 6:30 p.m. Late entries may be received on Friday morning, from 6:00 a.m. to 6:45 a.m. only by prior arrangement and with the written permission of the Flower Show Chairperson.

Division I — HORTICULTURE

Class 1	New World Gesneriads in Flower – Tuberous Sinningia speciosa species or hybrids (upright or pendent flowers) Other Sinningia species with rosette growth pattern Other Sinningia species with upright growth pattern Other Sinningia hybrids with rosette growth pattern Other Sinningia hybrids with upright growth pattern Other Sinningia species or hybrids (largest leaf less than 1" long) Other tuberous gesneriads
Class 8 A Class 9 A Class 10 S Class 11 S Class 12 C	New World Gesneriads in Flower – Rhizomatous Achimenes Kohleria Geemannia and its intergeneric hybrids Smithiantha Other rhizomatous gesneriads less than 5" in all dimensions including the container Other rhizomatous gesneriads
Class 14 C Class 15 C Class 16 E Class 17 C Class 18 A	New World Gesneriads in Flower – Fibrous-Rooted Codonanthe, ×Codonatanthus Columnea (Dalbergaria, Pentadenia, Trichantha) Gesneria Vematanthus Other fibrous-rooted gesneriads
SECTION D — C Class 20	Old World Gesneriads in Flower Aeschynanthus Chirita species Chirita hybrids Petrocosmea Saintpaulia species Saintpaulia hybrids or cultivars classified as miniatures (max of 6" diameter) Saintpaulia hybrids or cultivars classified as semi-miniatures (max of 8" diameter) Saintpaulia hybrids or cultivars classified as standards Saintpaulia trailers Streptocarpus, subgenus Streptocarpella Streptocarpus, subgenus Streptocarpus, species Streptocarpus, subgenus Streptocarpus, hybrids Other Old World gesneriads
SECTION E — Cand calyces are p	Gesneriads Grown for Ornamental Qualities Other Than Flowers – Decorative fruit permitted, but no flowers or buds showing color. A plant should have some special exture or growth habit to be entered in this section.

Class 33 Chirita Class 34 Episcia

Class 36 Petrocosmea

Class 38 Other gesneriad species Class 39 Other gesneriad hybrids

Class 35 Episcia with pink-and-white leaf variegation

Class 37 Other gesneriads with green-and-white leaf variegation

SECTION F — New Gesneriads – This section is for introductions made within the last 5 years, but not previously entered in this section of The Gesneriad Society Convention Show. Exhibitor must provide a white card (not to exceed 8-1/2"×11") giving educational information such as name of hybridizer, collector, place of origin, special cultural requirements.

Class 40 Species in flower

Class 41 Species not in flower

Class 42 Hybrids or named cultivars in flower

Class 43 Hybrids or named cultivars not in flower

SECTION G — Lesser-Known Gesneriads Seldom Grown or Seen in Shows – Exhibitor must provide a white card (not to exceed 8-1/2"×11") giving educational information such as habitat, source, special cultural requirements.

Class 44 In flower

Class 45 Not in flower

SECTION H — Collections of Gesneriads – A grouping of 3 to 5 different plants in flower or grown for ornamental qualities, or in combination (Saintpaulias must be in flower). Exhibitor must provide a white card (not to exceed 8-1/2"×11") with identification of plants. In Class 46, exhibitor is encouraged to reflect variety as this is a consideration in judging. In Class 47, exhibitor must provide educational information on the card.

Class 46 Plants of a single genus, either species, cultivars or hybrids

Class 47 Kinship group – Interspecific or intergeneric hybrid/hybrids exhibited with one or more parents

SECTION I — Trained or Sculptured Gesneriads – An educational 3"×5" white card stating what training the exhibit received and how it is to be viewed (all sides or from the front) is suggested.

Class 48 Bonsai, topiary, espaliered, or other style

SECTION J — Gesneriads Grown by a Novice – A Novice is anyone who has never won a blue ribbon in the Horticulture Division of a gesneriad (including AV) flower show. Exhibitors wishing Novice Status for the Horticulture Division may not enter other Horticulture classes.

Class 49 Gesneriads in flower

Class 50 Gesneriads grown for ornamental qualities other than flowers (no flowers or buds showing color allowed)

Division II — ARTISTIC

There is a limit of 4 entries in each class in Sections K, L and M, with the exception of Challenge Class 55 which has a limit of 8 entries and Class 58 which has no limit. Mail reservation requests to Frank Daspit, 1926 Lawrence St. NE, Washington, DC 20018, or email <artreserve@nationalcapitalgesneriads.org>. The deadline for making reservations is June 22, 2009. Artistic arrangers must leave the showroom by 8:30 p.m.

SECTION K — Arrangements of Fresh Cut and/or Growing Gesneriad Material

Class 51 "Fireworks" – This colorful celebration of the 4th of July bursts forth annually on the National Mall. Free-standing design not to exceed 18" in any dimension.

Class 52 "International Spy Museum" – Light and dark with shades in between will define this twin arrangement. Niche size: 18"H×18"W×18"D.

Class 53 "Folger Shakespeare Library" – Your interpretation of any of the bard's works (supply title). Skulls permitted. Niche size: $12"H \times 12"W \times 12"D$.

Class 54 "Cherry Blossom Parade" – Using blossoms, buds and calyces only, interpret this herald of Spring in Washington. No foliage, but other line material permitted. Niche size: $8\text{"H} \times 8\text{"W} \times 8\text{"D}$.

SECTION L — Arrangements of Fresh Cut Gesneriad Material

Class 55 CHALLENGE CLASS – all materials will be provided, *except mechanics and container*. The class title will be announced at 3:30 p.m. at the opening of Entries, and materials will be available at that time. Niche size: 10"H × 10"W × 8"D.

Class 56 "Kite Festival" – Whether flown singly or in tandem, the multishaped fliers attract attention with their swooping and soaring. Your interpretation in a mobile design. Niche size: 24"H \times 16"W \times 12"D.

Class 57 "Textile Museum" – A <u>foliage only</u> arrangement emphasizing color, pattern and/or texture. Niche size: $8"H \times 8"W \times 8"D$.

Class 58 "Silver Spring" – A sparkling underwater design not to exceed 12" in any dimension. A 12" square black base will be provided under each arrangement.

- SECTION M Arrangements of Growing Gesneriad Material
 - Class 59 "Kenilworth Aquatic Gardens" A pond-side planting reflected in water. Niche size: $8"H \times 8"W \times 8"D$.
 - Class 60 "National Museum of the American Indian" Using plants and materials indigenous to the Americas (North, Central or South), interpret an aspect of Native American culture. Niche size: 12"H × 12"W × 12"D.
 - Class 61 "Old Towne Alexandria, VA" This part of town dates back to the mid 18th century. A table centerpiece for a "Publik House" or Inn, not to exceed 18" in any dimension, to be staged for viewing on all sides.
- SECTION N Plantings of Growing Material
 - Class 62 Terrarium, straight-sided not to exceed 24" in any dimension.
 - Class 63 Terrarium, curved not to exceed 24" in any dimension.
 - Class 64 Tray Landscape not to exceed 12" in any dimension.
 - Class 65 Tray Landscape exceeds 12" in at least one dimension and not to exceed 24" in any dimension.
 - Class 66 Natural Garden (planted on rock or wood) not to exceed 12" in any dimension.
 - Class 67 Natural Garden (planted on rock or wood) exceeds 12" in at least one dimension and not to exceed 24 inches in any dimension.
- SECTION O Artistic Entries by Novices A Novice is anyone who has never won a blue ribbon in the artistic division of a gesneriad (including AV) flower show. Exhibitors wishing Novice Status for the Artistic Division may not enter other Division II classes.
 - Class 68 Artistic entries suitable for any of the classes in Sections K, L, M, or N, except for Challenge Class 55. Exhibitor must identify (on a 3"×5" white card) the name of the class chosen and the plant material used.

Division III — THE ARTS

SECTION P — Photography – The subject must be identified on the entry card. Prints should not exceed 8"×10"; mats should not exceed 11"×14". Exhibitors must provide easels for prints 5"×7" or over. Slides must be mounted for projection in a standard carousel projector.

- Class 69 Color transparency
- Class 70 Color print of parts of a gesneriad (flowers, fruit, foliage, etc.)
- Class 71 Color print of a whole gesneriad plant
- Class 72 Color print of gesneriad(s) growing in a natural habitat. The subject must be portrayed growing wild in an area of the world considered by botanists to be its natural range; not cultivated in pots, gardens or greenhouses. Exhibitors must provide a white card (maximum 8-1/2"×11") detailing location, climate, month/year photo was taken, how the site was accessed and any other pertinent information.
- Class 73 Monochrome print
- SECTION Q Arts and Crafts Representing Gesneriads
 - Class 74 Painting or drawing (easel must be provided by exhibitor)
 - Class 75 Needlework or textile (a 3"×5" white card is required giving the source of the design)
 - Class 76 Other arts and crafts

Division IV — COMMERCIAL AND EDUCATIONAL

Reservations for Sections R and S may be sent to Elizabeth Varley, 2002 Orleans Road, Arden, DE 19810-4041, e-mail to <edureserve@nationalcapitalgesneriads.org> or phone 302-475-1098. Please reserve for all by June 22, 2009.

- SECTION R Commercial Displays
 - Class 77 Display table with a grouping of gesneriads (10 or more plants)
 - Class 78 Display table with a grouping of gesneriads (fewer than 10 plants)
- SECTION S Educational Exhibits
 - Class 79 Exhibit illustrating phases of scientific or historical research or gesneriad promotion
 - Class 80 Exhibit of plant material with educational information
 - Class 81 Exhibit of photograph(s) The purpose of this class is to showcase plant material which, because of its seasonal nature or rarity in cultivation, is not often exhibited live. The exhibitor must provide a white card (not to exceed 8-1/2"×11") outlining source, natural habitat, cultural information, and reason for suitability in this class.
 - Class 82 Exhibit of photograph(s) of gesneriads growing outdoors as bedding, accent, or container plants. Gesneriad(s) must be identified and additional information about climate, growing medium, culture, etc., included.

RULES

- 1. Each exhibitor must prepare a list of plants and other exhibits with the appropriate Section and Class numbers to facilitate the work of the Entries Committee. The Flower Show Committee will assist in identifying material unknown to the exhibitor. A computerized entry system will be used, and an entry form will be included in each registration packet. Exhibitors must complete their entry forms and submit them at the Registration table on Wednesday or by 8:30 a.m. on Thursday latest. Your cooperation will help expedite the actual entries process for everyone.
- All plant material must be free of insects and disease. All entries will be inspected, including entries for exhibit only.
- Entries shall be in accordance with the schedule and must be approved by the Classification Committee. Nonconformity to schedule may bring disqualification.
- Exhibitors need not be members of The Gesneriad Society.
- 5. Entries will be accepted only during the hours specified. An exhibitor may request that the Classification Committee accept an entry for exhibit only. Educational information should be provided where appropriate. These entries, and any arriving after the close of Entries, will be placed in a separate area of the showroom for exhibit only, and will not be judged.
- 6. All entries will be staged in the showroom by the Placement Committee. Collections and artistic arrangements may be placed in the showroom by the exhibitor in the space designated, and during the stated time for entries.
- 7. In fairness to amateur growers, institutions may not make more than two entries in each of the Horticulture, Artistic or Arts Divisions of the flower show. The same restriction applies to commercial growers whose employees assist with the culture and grooming of potential entries.
- 8. Classes may be subdivided or consolidated at the discretion of the Show Committee after entries close.
- No entries may be removed from the showroom until the show closes. All entries must be checked out through the Show Committee.
- 10. Standard competitive judging, as established by The Gesneriad Society, will be used.
- 11. Awards will be made according to the following point scores: 1st, blue ribbon (90-100); 2nd, red ribbon (at least 80); 3rd, yellow ribbon (at least 70). Honorable Mentions may also be awarded.
- 12. Special Awards (more than a class ribbon) will be reserved for members of The Gesneriad Society unless specifically offered to nonmembers. An exhibit must score 90 or above to be considered.
- 13. The awards for Best and Runner-Up to Best Gesneriad in Show in Division I, (excluding Saintpaulia hybrids) are given for horticultural perfection. These awards and those for Best in Divisions II, III and IV are reserved for members of The Gesneriad Society. Entries in all Divisions must score 95 points or higher to be considered for these awards.
- 14. Sweepstakes and Runners-up to Sweepstakes awards for any Division require a minimum of three blue ribbons in a Division to be eligible. These awards are reserved for members of The Gesneriad Society.
- 15. The Gesneriad Society will endeavor to protect all entries, but assumes no responsibility for loss or damage.

Additional Horticulture Division Rules and Information

- All plants must be grown by the exhibitor and have been in the exhibitor's possession for at least three
 months prior to the show.
- An exhibitor is limited to one specimen of the same plant per class. An exhibitor may submit more than one entry per class, provided each entry is a different cultivar, unless otherwise prohibited.
- Exhibitors of Saintpaulia hybrids are required to respect size limitations as defined by the hybridizer as registered in the AVSA Master Variety List.
- 4. Exhibitors will be permitted to indicate the front of a horticulture entry.
- 5. No particular type of container is specified; however, all containers used must be clean. A protective container or cover made of transparent material to shield delicate plant material from dry air or cold drafts may be used for any exhibit requiring it. Such plants may be judged uncovered.
- 6. An exhibitor may provide educational information on a white 3"×5" card for any entry if desired.
- 7. Seed pods or fruit (not spent blossoms) are permitted on all gesneriads entered in the Horticulture Division. The exhibitor should realize when entering a blooming plant with seed pods or fruit that some judges could find them an enhancement of, or a detraction from, the plant's appearance.

Additional Artistic Division Rules and Information

- Gesneriads must predominate.
- 2. While Saintpaulias are permitted in all artistic classes, the use of other gesneriads is strongly encouraged.
- 3. Other live and dried plant material is permitted but no artificial plant material is allowed.
- 4. Plant material used in the Artistic Division need not be grown by the exhibitor.
- All plant material used is to be identified on an accompanying 3"x5" white card. Supplemental titles or descriptions may be added but are not required.
- 6. Accessories are optional unless specifically required.
- 7. Table covers and niches will be neutral in color. Exhibitors may provide additional background.
- 8. Cut blossoms or plant material may be placed in artistic arrangements on Friday morning from 6:00 to 6:45 a.m.
- Straight-sided terrariums are composed of flat pieces of glass or plastic; curved terrariums are composed of rounded pieces.

Additional Arts, Commerical and Educational Division Rules and Information

- 1. All entries must have been made by the exhibitor and feature gesneriads in some form.
- There is a limit of one entry per exhibitor per class.
- 3. Entries must not have been exhibited before in any Gesneriad Society Convention show.
- 4. In Photography, the exhibit is being judged on the skill, technique and composition displayed, not on the quality of the plant material chosen as a subject, except for Class 71.
- Éducational exhibits may be entered by institutions, chapters, study groups or individuals. In Class 79, any
 project relating to gesneriads may be presented with illustrative material that may or may not include live
 plant material.

The Gesneriad Society 53rd Annual Convention — 2009 Room Reservation Form

Mail to: The Hilton Silver Spring

Reservations 8727 Colesville Road

Silver Spring, MD 20910

Hotel: 301-589-5200 Fax: 301-588-1841

Toll-free: 800-445-8667

To obtain the special group rate, inform reservations you will be attending The Gesneriad Society Convention 2009. In order to guarantee reservations, please enclose a check for the amount of the first night's room and tax, or fill out the credit card information below.

For on-line registration (link available on the Society website):

http://www.hilton.com/en/hi/groups/personalized/DCASSHF-GSC-20090629/index.jhtml

Name (primar	y)
	ing with)
Address	City
State/Province	Country Zip/Post Code
Home Phone	Cell or Other Phone
Arrival Date _	Time
Departure Dat	e Number of Persons Sharing Room
□N	on-Smoking Room Requested Smoking Room Requested
Rates: \$11	9 Single/Double \$149 King Bed Deluxe \$179 Double/King Suite
C	Check-in Time: 3:00 p.m. Check-out Time: 12:00 Noon
	Rooms are subject to all applicable taxes (currently 13%).
	ons must be received by June 8, 2009 to guarantee convention rates. nvention room rates in effect three days before and three days after convention, based on availability.
Circle One:	American Express Diner's Club Master Card Visa
Card #	Expiration Date
Signature	
My check for o	ne night deposit is enclosed \$
	k-out fee of \$50 will apply if the hotel is not informed prior to check-in in reservation check-out date

On-site valet parking is available at \$12/day.

Parking is also available at the Town Square Garage (information will be provided).

Complimentary hotel shuttle is available within a two-mile radius.



Convention 2009 tee-shirt (available in lavender, lime, and fuchsia) and blue tote bag can be ordered on the website <www.gesneriadsociety.org> or on the convention registration form on page 24

Touring DC's Horticultural Gems

Nell Hennessy, Local Convention Chair

On Thursday, July 2, 2009, you'll have the opportunity to tour two of DC's horticultural gems – the U.S. Botanic Garden and the National Arboretum.

U.S. Botanic Garden. We'll leave the hotel at 9:00 a.m. and head to the U.S. Botanic Garden. Located on the National Mall at the foot of the U.S. Capitol Building grounds, the U.S. Botanic Garden is the oldest one in the country. To get a sense of the Botanic Garden, visit its website http://www.usbg.gov>. You can download a free book describing the garden and its history.

When we first arrive, we'll tour Bartholdi Park, an outdoor garden demonstration landscape that surrounds the historic Bartholdi Fountain. The Park was created in 1932 and named for Frederic Auguste Bartholdi (1834-1904), the sculptor of the historic fountain located at its center. (Bartholdi also designed the Statue of Liberty.) The Bartholdi Fountain, designed symmetrically in three identical sections, features sea creatures both real and mythological (turtles, fish, sea shells, sea nymphs, tritons). The beds in the Park were geometrically arranged and planted in formal classical style to complement the classical style of the fountain and to accommodate public gatherings.

When the Botanic Garden opens at 10:00 a.m., we'll begin our tour of the Conservatory, a spectacular glass and aluminum greenhouse divided into separate rooms, each one simulating a different habitat. The Conservatory, which was completely rebuilt before re-opening in 2001, features a wide variety of plants from around the world – approximately 4,000 are on display. The Palm House structure, now called the Jungle, has been recreated to the original design but now includes a walkway 24 feet above the floor, accessible by both stairs and elevator.

Outside the Conservatory, we'll tour the newly created National Garden (which features plants native to the Mid-Atlantic region, as well as a Butterfly Garden, Rose Garden and the First Ladies Water Garden), providing "living laboratories" for environmental, horticultural, and botanical education in a contemplative setting. The plantings have been redesigned during the last decade and are continuously updated to reflect modern trends in American horticulture and new plant introductions.

At 11:30 a.m., buses will leave the U.S. Botanic Garden. For those wanting to return to the hotel to prepare for the flower show, one bus will head back to the hotel by a route that takes you by the Smithsonian Institution and various monuments. The second bus will go past the Capitol building on the way to the National Arboretum where box lunches will be available.

National Arboretum. The National Arboretum occupies 446 acres with 9.5 miles of winding roadways. Established in 1927 by an Act of Congress, the Arboretum is administered by the U.S. Department of Agriculture's Agricultural Research Service. The Arboretum's mission is to conduct scientific research and educate the public about trees, shrubs, and floral plants. The Arboretum gardens conserve and showcase plants that enhance the environment.

Our visit will focus on the National Bonsai & Penjing Museum, the National Herb Garden and the aquatic plants and fish surrounding the Administration Building. The National Bonsai and Penjing Museum began when Japanese bonsai enthusiasts in the Nippon Bonsai Association donated 53 bonsai to the people of the United States to commemorate the U.S. Bicentennial in 1976. The collection has grown steadily with the addition of pieces from American bonsai masters and penjing from China. Today, three pavilions house about 150 plants. The International Pavilion is a focal point that celebrates the related art forms of viewing stones and ikebana, a Japanese style of flower arranging. To get a feel for these graceful arrangements, you can take the online Bonsai Virtual Tour http://www.usna.usda.gov/Gardens/collections/VirtualTours/BonsaiVirtualTour.html.

The National Arboretum Aquatic Garden surrounds the Administration Building and Visitor Center. Across from the Administration Building is the National Herb Garden which began as a gift to the people of the United States from the Herb Society of America. It is the largest designed herb garden in the nation that includes annual, perennial, and woody herbal plants.

Given the size of the Arboretum we won't have time to explore all the gardens but you can check them out on the Arboretum's website http://www.usna.usda.gov. We'll leave the Arboretum around 2:00 p.m. to head back to the hotel for the rest of the convention activities.

Saturday Evening

Join us for a buffet dinner overlooking the Washington Channel on the District's Southwest Waterfront. Phillips Seafood is the only all-you-can-eat seafood buffet in Washington, DC. Their spectacular buffet features over 30 fresh seafood selections daily, as well as regional specialties, made-to-order stations and non-seafood options. Transportation to the restaurant and the all-you-can-eat buffet are included in the trip pricing. Drinks are on your own.

The Shopping Mall

"OZARK" Sinningias, African Violets and other Gesneriads. Email: <plantman@ipa.net> (no catalog). Dave's Violets, 1372 S. Kentwood Avenue, Springfield, MO 65804 (417) 887-8904 <www.davesviolets.com>.

MRS STREP STREPS – Streptocarpus, Chiritas, and other Gesneriads. Email for list of available plants. Kathy Spissman, 4086 Brownlee Dr., Tucker, GA 30084. Phone (770) 939-5289. Email: mrsstrepstreps@comcast.net.

OUT OF AFRICA, Blooming Streptocarpus. Send \$1 for catalog. Gary S. Mikita, 2842 Brown St., Portage, IN 46368. Phone (219) 763-4861. E-mail garymikita@cs.com.

World-Class Gloxinia Tubers: These plants have genes that will scare you! Huge, double flowers in colors never seen before. \$8.50 each. More information, grow with: Steve, LOGAN NURSERY, Wayne, NE 402-375-3029, www.gloxiniane.com.

PAT'S PETS, Gesneriads and African Violets. Send \$2.00 for catalog. Pat's Pets, 4189 Jarvis Rd., Hillsboro, MO 63050. Phone (636) 789-3604. E-mail PATSPETS@sbcglobal.net. Internet Home Page (catalog) http://www.geocities.com/patspets@sbcglobal.net.



Discover a World of Diversity!

Membership \$25/year

- 6 issues of the *Begonian*
- Seed Fund
- Slide & Video Library

American Begonia Society

5218 Brock Drive Bartlesville, OK 74006

www.begonias.org



The Association for plant & flower people who grow in hobby greenhouses, windows, and under lights!

Quarterly Magazine and Newsletter • Growing & Maintenance Help & Advice Dues: USA \$28/yr., Canada/Mexico \$30/yr., Overseas \$31/yr. (US funds/bank, MO) Sample magazine \$3.50, Directory of Manufacturers & Distributors \$2.50

Hobby Greenhouse Association

80 Deaconess Road, Suite 443, Concord, MA 01742-4173

http://www.hobbygreenhouse.org

Special thanks to Jeff Smith, Jim Smith, Larry Skog, and the Royal Botanical Garden Edinburgh for providing information and images for this *Saintpaulia* species issue (with additional assistance from Dirk Bellstedt, John R. Clark, Johanna Kolehmeinen, Dale Martens, Michael Möller, Ron Myhr, and Anton Weber).

First Quarter 2009 37

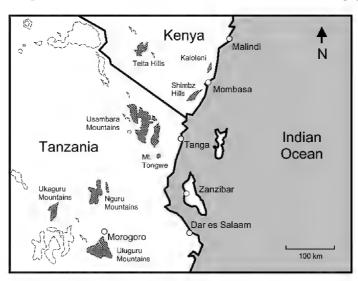
James F. Smith < jfsmith@boisestate.edu> Boise, Idaho, USA

By far, the most widely grown and cultivated members of Gesneriaceae are species, hybrids and cultivars of *Saintpaulia* – the African violet. Recent changes have been proposed in the number of species recognized by science in this group so it seems relevant to review its history.

The first species of *Saintpaulia* was introduced into cultivation by Baron Walter von St. Paul-Illaire in 1892. He was the German commissioner of Tanganyika – now part of Tanzania – who collected seeds in the Usambara Mountains and sent them back to his father in Germany. The plant was named *S. ionantha* by Hermann Wendland in 1893. *S. goetzeana* and *S. pusilla* were the first additions after that, discovered by W. Goetze in the Uluguru Mts. nearby. These names were published by Engler in 1900. In 1921 the fourth species was added, *S. grotei*.

Between 1947 and 1956, seven additional species were added. At this point the genus deserved a full taxonomic treatment since some species seemed to be similar to others and possibly not meriting distinct species status, whereas other plants seemed not to match any of the published names. In 1958, B. L. Burtt published a revision of the genus and raised the number of species to 19. In 1964 Burtt had sufficient additional material to make an update which brought the total number of species to 20 with four named varieties. This was to become the standard for the genus until 2006.

B. L. Burtt did not undertake this task lightly. He was most concerned about the species from the East Usambara Mountains. In his 1958 paper he



East Africa with shaded areas showing approximate locales of *Saintpaulia* species (map adapted by John R. Clark from original by S. Johansson, Saintpaulias in their natural environment, Biological Conservation 14: 45-62 1978.

commented "none of the species in the E. Usambara area is so well marked off from all other species as are those from the W. Usambaras, the Nguru or the Uluguru Mountains." This region contained the highest number of species compared to the other regions (Table 1).

Burtt made his taxonomic decisions based only on the morphology of the plants. He had herbarium specimens that don't preserve the general features of the plants well, but he also had living plants for all but four of the species. Live plants clearly retain the features that are needed for taxonomic decisions, but can generate different problems if the characters of the individuals are taken as characters of the species. Imagine selecting a handful of humans from around the planet and then using those 20 individuals to try to decide whether each represents a different species or not!

TABLE 1. Distribution of the 20 species of *Saintpaulia* delimited by Burtt (1964). Each species was initially thought to have a narrow distribution. Later explorations have revealed that some species are more widespread and not restricted to the areas listed here alone, e.g., *S. goetzeana* is also known from the Ukaguru Mountains south of the Nguru Mountains. Names in bold are those that have evidence of being both phylogenetically distinct from other species and that consist of a single evolutionary unit. Note that *S. inconspicua* has yet to be sampled in any phylogenetic analysis.

Region	Species Burtt 1964	Darbyshire 2006	Suggested Herein	
Taita Hills, Kenya	S. teitensis	S. teitensis	S. teitensis	
Kaloleni, Kenya (lowlands)	S. rupicola	S. ionantha	S. rupicola	
Usambara Mountains, Tanzania	S. confusa	S. ionantha	S. ionantha	
	S. difficilis	S. ionantha	S. ionantha	
	S. diplotricha	S. ionantha	S. ionantha	
	S. grandifolia	S. ionantha	S. ionantha	
	S. grotei	S. ionantha	S. ionantha	
	S. intermedia	S. ionantha	S. ionantha	
	S. ionantha	S. ionantha	S. ionantha	
	S. magungensis	S. ionantha	S. ionantha	
	S. orbicularis	S. ionantha	S. ionantha	
	S. pendula	S. ionantha	S. ionantha	
	S. shumensis	S. shumensis	S. shumensis	
	S. tongwensis	S. ionantha	S. ionantha	
	S. velutina	S. ionantha	S. ionantha	
Nguru Mountains, Tanzania	S. brevipilosa	S. ionantha	S. brevipilosa	
	S. nitida	S. ionantha	S. nitida	
Uluguru Mountains, Tanzania	S. goetzeana	S. goetzeana	S. goetzeana	
	S. inconspicua	S. inconspicua	S. inconspicua	
	S. pusilla	S. pusilla	S. pusilla	

Modern approaches to the systematics of the group using DNA began in the mid-1990's. In my lab and that of Quentin Cronk and Michael Möller in Edinburgh, Scotland, we conducted separate independent studies to determine the phylogenetic (evolutionary) relationship between *Saintpaulia* and *Streptocarpus*. In short, both sets of data showed that *Saintpaulia* was nested

within *Streptocarpus*, specifically within subgenus *Streptocarpella* (Möller and Cronk 1997b; Smith et al. 1998).

Modern systematics does not like one group nested within another. In general when groups such as this are found, the result is either 1) all the species become a single genus, or 2) the genus that the group is imbedded in takes on additional names. For example, all species of *Saintpaulia* could be renamed as species of *Streptocarpus*, or if *Saintpaulia* is retained, then one group of *Streptocarpus* subgenus *Streptocarpella* could take on the name *Streptocarpella* and the other group would need another name (not that I am planning on it, but Minnesota residents might like the sister of *Saintpaulia* to be *Minneapolisia*!).

However, note that such name changes have not been proposed. This stems from two main facts. The first is that the species to be renamed are among the most widely cultivated and recognized group in all Gesneriaceae. None of us that revealed the relationship were willing to make such a change that would have created confusion and uproar in the horticultural community. The second reason is perhaps even more important in that we were willing to recognize that sometimes evolution will create such groups. The name Saintpaulia conveys information about a group of closely related species that reflect an evolutionary trend. Likewise the group of species called Streptocarpus subgenus Streptocarpella reflect a different evolutionary trend. Changing the name does not change the evolutionary history and since we now had solid data to show the evolutionary history, there was no need to make the name change.

Three later studies focused on phylogenetic analyses within *Saintpaulia* (Möller and Cronk 1997a; Lindqvist and Albert 1999, 2001). The most recent analysis (Lindqvist and Albert 2001) has the greatest sampling of populations and species with 55 accessions and all known species except *S. inconspicua*. However, although Möller and Cronk (1997a) used one DNA region and Lindqvist and Albert (1999, 2001) used a different region, both sets of studies found similar results.

In general the results can be broken into two major categories. The first of these are relationships that are considered well-supported. By this we mean that the data used in the analysis are robust enough to withstand some minor errors in the data, analysis, or the addition of new data. One indicator of support in phylogenetic analyses is the bootstrap. Bootstrap values range from 0 to 100 with higher numbers indicating more support from the data. By convention, most systematists accept bootstrap values greater than 75 to indicate a well-supported relationship.

Under these criteria we can compare the three analyses and discuss well-supported groups. The species from the Uluguru Mountains each receive strong support to be retained as distinct from each other, but also to be more closely related to each other than to any other species. Saintpaulia inconspicua is also from these regions, but has never been sampled in any phylogenetic analysis.

Saintpaulia teitensis, from the Taita (or Teita) Hills region of Kenya is also well supported as distinct as are both S. brevipilosa and S. nitida. The latter two species are from the Nguru Mountains and both receive support as being closely related to each other. The group of species from the Usambara Mountains and the lowlands of Kenya also was recovered as strongly supported. Saintpaulia rupicola, the species from Kaloleni, Kenya, along with

several putatively undescribed species from the same region is also well-supported as distinct from other species. In general, where populations are geographically isolated, they tend to receive strong support as distinct based on the DNA sequence data.

The other category of relationship that is seen on many trees are those that are poorly supported, or unresolved. Poorly supported relationships are those that have bootstrap values less than 75, and unresolved relationships are exactly that – we have no idea which species is each other's closest relative and simply lump them together as a unit.

The phylogenetic analyses within *Saintpaulia* have many poorly supported or unresolved relationships, almost all of them among the species found in the Usambara Mountains. In many cases where more than a single individual was sampled per species, the individuals are shown to be more closely related to other species than they are to each other. These data tend to indicate gene flow among the different species which is often an indicator that species boundaries are not as clear as the names systematists have applied to them! As a reminder, note that these were the same group of species that B. L. Burtt (1958,1964) had the most difficulty trying to separate out using morphological data alone 50 years earlier.

There are two species among the large group of unresolved Usambara Mountain group that merit attention. The first is *S. rupicola* which as mentioned above receives strong support as distinct from other species, and like the species from the Taita Hills, Nguru Mountains, and Uluguru Mountains, is geographically isolated from the Usambara Mountains. The other species is *S. shumensis*. This species is separated from the rest of the Usambara Mountain group in the analysis of Lindqvist and Albert (2001), but is poorly supported. However, in the earlier results of Möller and Cronk (1997a), this species was in the same position and also received low support. Each analysis cannot be relied upon in and of itself, but it is likely if the data were combined, the support for separating *S. shumensis* from the remainder of the Usambara Mountain species would receive strong support.

Darbyshire (2006), in preparing the *Saintpaulia* treatment for Flora of Tropical East Africa made a taxonomic combination reducing the 20 species to six (Table 1). He based his combination on the phylogenetic analyses that had been completed citing Lindqvist and Albert (2001), habit distinction that sometimes (but not always) can be altered in cultivation, and whether the species were geographically or ecologically distinct from each other.



Saintpaulia shumensis (photo by Jeff Smith)



Saintpaulia teitensis (photo by John Evans)



Saintpaulia goetzeana (photo by John Evans)



Saintpaulia ionantha subsp. ionantha var. diplotricha (grown at RBGE; photo by Michael Möller)



Saintpaulia ionantha subsp. grandifolia (grown at RBGE; photo by Michael Möller)

Note, when Darbyshire (2006) put *S. brevipilosa* and *S. nitida* into *S. ionantha* but kept *S. shumensis* as distinct, he generated a species (*S. ionantha*) inconsistent with modern phylogenetic classification. We may be able to tolerate the name of *Saintpaulia* even though we know it has evolved from within *Streptocarpus* subgenus *Streptocarpella*, but it is generally agreed that new name combinations should not generate such groupings.

Reviewing the phylogenetic and geographic distribution data of these species, I do not fully agree with the taxonomic revision of Darbyshire (2006). Instead, I would make the following recommendations based on the phylogenetic data summarized above. Saintpaulia goetzeana, S. pusilla, and S. teitensis should be retained as distinct species. Likewise, S. inconspicua is also geographically and morphologically distinct from other species and should also be retained. Saintpaulia shumensis, although not receiving strong support for its distinctiveness from any single analysis, is likely to be distinct if the data were used in combination. Furthermore, it is ecologically distinct from other species. In these five names, I am in agreement with Darbyshire (2006).

However, the phylogenetic data also indicate that *S. brevipilosa* and *S. nitida* are each distinct from each other (Möller and Cronk 1997a; Lindqvist and Albert 1999, 2001) and from the remainder of the species Darbyshire (2006) combined into *S. ionantha*. The evidence is present for the distinctiveness of these two species and by retaining them as distinct, we do not generate a *S. ionantha* with other species embedded within it.

Lastly, although it is not necessary to maintain species that are consistent with phylogenetic analyses, the DNA sequence data provide strong support that *S. rupicola* is distinct from other species. Its geographic isolation also argues for its separate status, especially since geographic isolation seems to be an important factor in species delimitation within *Saintpaulia*. Please note that *S. rupicola* is within the group of species from the Usambara Mountains, but its relationship to any other species in that group is unresolved. Should further evidence arise that *S. rupicola* is more closely related to any one population of *S. ionantha*, then a combination of *S. rupicola* into *S. ionantha* may be called for. Those data currently do not exist. Therefore, I

recommend that nine species of Saintpaulia be retained rather than six (Table 1). Each of these species fits the phylogenetic data that is currently available and does not generate names that are contrary to modern principles of phylogenetic classification.

To fully resolve what is occurring among the S. ionantha group will require detailed population sampling. Recent work by Johanna Kolehmeinen at the University of Helsinki is an example of the type of work that can be done on many of these populations and will provide critical data regarding the ecology, systematics, conservation, and evolution among these populations (Kolehmeinen and Mutikainen 2006, 2007; Kolehmeinen and Korpelainen 2008).

Literature Cited:

- Burtt, B. L. 1958. Studies in the Gesneriaceae of the Old World XV: The genus Saintpaulia. Notes from the Royal Botanic Garden, Edinburgh 22: 547-568.
- Burtt, B. L. 1964. Studies in the Gesneriaceae of the Old World XXV: Additional notes on Saintpaulia. Notes from the Royal Botanic Garden, Edinburgh 25: 191-196.
- Darbyshire, I. 2006. Gesneriaceae. In Flora of Tropical East Africa. H. J. Beentje and S. A. Ghazanfar, eds. Royal Botanic Gardens, Kew.
- Kolehmeinen, J. and P. Mutikainen. 2006. Reproductive ecology of three endangered African violet (Saintpaulia H. Wendl.) species in the East Usambara Mountains, Tanzania. African Journal of Ecology 44: 219-227.
- Kolehmeinen, J. and P. Mutikainen. 2007. Population stage structure, survival and recruitment in the endangered East African forest herb Saintpaulia. Plant Ecology 192: 85-95.
- Kolehmeinen, J. and H. Korpelainen. 2008. Morphotypes, varieties, or subspecies?: genetic diversity and differentiation of four Saintpaulia (Gesneriaceae) morphotypes from the East Usambara Mountains, Tanzania. Botanical Journal of the Linnean Society 157: 347-355.
- Lindqvist, C. and V. A. Albert. 1999. Phylogeny and conservation of African violets (Saintpaulia: Gesneriaceae): new findings based on nuclear ribosomal 5S non-transcribed spacer sequences. Kew Bulletin 54: 363-377.
- Lindqvist, C. and V. A. Albert. 2001. A high elevation ancestry for the Usambara Mountains and lowland populations of African violets (Saintpaulia, Gesneriaceae). Systematics and Geography of Plants 71: 37-44.
- Möller, M. and Q. C. B. Cronk. 1997a. Phylogeny and disjunct distribution: evolution of Saintpaulia (Gesneriaceae). Proceedings of the Royal Society, London, Series B 264: 1827-1836.
- Möller, M. and Q. C. B. Cronk. 1997b. Origin and relationships of Saintpaulia (Gesneriaceae) based on ribosomal DNA internal transcribed spacer (ITS) sequences. American Journal of Botany 84: 956-965.
- Smith, J. F., M. Kresge, M. Möller, and O. C. Cronk, 1998, The African violets (Saintpaulia) are members of Streptocarpus subgenus Streptocarpella (Gesneriaceae): Combined evidence from chloroplast and nuclear ribosomal genes. Edinburgh Journal of Botany 55: 1-11.

Lauray of salisbury

432 UNDERMOUNTAIN ROAD SALISBURY, CONN. 06068 PHONE (860) 435-2263 WEBSITE: www.lauray.com

ORCHIDS

GESNERIADS

CACTI & SUCCULENTS & MORE

BEGONIAS

Catalog — \$2.00

Visitors Always Welcome

Usually open daily, 10:00 A.M. to 5:00 P.M.

Additions to the Hybrid Seed List in the 4Q08 Issue of Gesneriads:

Chirita linearifolia × longgangensis Sinningia (cardinalis 'Innocent' × iarae) × self

Sinningia leopoldii × iarae Sinningia (leucotricha × cardinalis)

Sinningia 'Beata' (leucotricha × leopoldii)

Sinningia ('Dollbaby' × 'Mercury') ×

 Sinningia 'Elin' × leucotricha Sinningia guttata × speciosa 'Cabo Frio'

Sinningia 'IO' × self

Sinningia 'Lavender Crest' × self

Sinningia 'Ozark Pink Petunia' × self

Sinningia 'Pink Pearl' × self

Sinningia 'Purple Crest' × self Sinningia speciosa pink & rose pink Sinningia speciosa blue slipper × self

Sinningia speciosa lavender & pink

slipper × self

Streptocarpus 'Amy' × self

Streptocarpus 'Bristol's Daisy Jane' × self

Streptocarpus ('Canterbury Surprise' × 'Bristol's Leopard Skin') × self

Streptocarpus 'Canterbury Surprise' × 'Charlotte'

Streptocarpus 'Canterbury Surprise' × 'Emily's Song'

Streptocarpus 'Canterbury Surprise' × 'Ice Berg Blues'

Streptocarpus 'Charlotte' × self

Streptocarpus 'Ella Mae' × self Streptocarpus 'Franken Dainty Lady' × self

Streptocarpus 'Fernwood's Cherries Jubilee' × self

Streptocarpus 'Hera' × self

Streptocarpus 'Ice Berg Blues' × 'Guidelines'

 $\begin{array}{c} \textit{Streptocarpus} \text{ 'Ice Berg Blues'} \times \\ \text{'Crystal Beauty'} \end{array}$

Streptocarpus 'Ice Berg Blues' × ('Canterbury Surprise' × 'Bristol's Leopard Skin')

Streptocarpus 'Ice Berg Blues' × 'Paper Moon'

Streptocarpus 'Iced Amethyst Showoff' × 'Bristol's Bluebird' Streptocarpus 'Iced Amethyst

Showoff' × 'Susan'

Streptocarpus 'Jenny' × self Streptocarpus 'Ken's Purple' × self

Streptocarpus 'Northwood's Bear-ly Salmon' × 'Iced Amethyst Showoff' Streptocarpus 'Persephone' × self

Streptocarpus 'Persephone' × self Streptocarpus 'Pink Ice' × self Streptocarpus (pole libro petrod)

Streptocarpus (pale lilac netted) × self

Streptocarpus 'Good Vibrations' × (primulifolius × rexii selfed)
Streptocarpus (primulifolius × rexii

selfed) × ('Cape Essence' × 'Iced Pink Flamingo')

×Gloxinimannia 'Circe'

Deletions from Hybrid Seed List 4Q08:

Streptocarpus 'Pink Ice'
Streptocarpus 'Falling Stars' × self

Subgenus *Streptocarpella caulescens* × *pallidiflorus* (natural hybrid)

Send orders for hybrid seed to:
Gussie Farrice
121 Nelson Avenue
Staten Island, NY 10308

Color Photo Sponsorship

Color photos on page 13 sponsored by Ben Paternoster in lieu of speaker's honorarium and expenses for Long Island Chapter program

Color photo on page 49 sponsored by Arleen Dewell



Introduced into cultivation in 1893, *Saintpaulia ionantha* proved to be a horticulture sensation, and within ten years "African violets" spread all over Europe and from there around the world. This 1902 illustration from Revue Horticole shows early hybrids in three colors.

JOIN TODAY! The African Violet Society of America



2375 North Beaumont, Texas 77702

409-839-4725

http://avsa.org/ Write or call today for information.

Hybridizing with the Saintpaulia Species

Dr. Jeff Smith <jsmith4@bsu.edu> Indiana Academy, Ball State University, Muncie, Indiana, USA

My work in hybridizing with the *Saintpaulia* species is the natural outcome of two of my personal research interests; the genetics of African violets and the conservation of the wild species. Several years ago, I decided that a good way to promote the conservation of the *Saintpaulia* species was to demonstrate that they are a valuable genetic resource for hybridizers. I speculated that if I could develop some strong performing hybrids using the species, then perhaps more growers would be interested in growing and conserving them. The purpose of this article is to share some of my observations and experiences over the last several years on hybridizing with the *Saintpaulia* species.

Most of today's African violet cultivars were developed out of two or three *Saintpaulia* species. However, this limited number of species in breeding programs does not appear to be a result of fertility problems between the species. Clayberg (1961) and Arisumi (1964) crossed several *Saintpaulia* species and looked for barriers to hybridization. Their results are summarized in Table 1. The nomenclature used for the species in Table 1 follows that of Darbyshire (2006) as modified by Smith et al. (2008) for the African Violet Society of America. Species with a "+" symbol at their intersection are interfertile. Those with a "/" showed some resistance to hybridizing. Those with an "o" symbol did not form hybrids in these studies. Generally, the *Saintpaulia* species that have been tested hybridize readily with the exceptions of *S. nitida* and *S. shumensis*. More testing is necessary to gauge the full range of fertility between all of the species, but it might be hypothesized that most hybridize with each other and with modern cultivars.

Making the actual cross with the Saintpaulia species is simple once you get the plant to flower. Most of the species flower easily under typical growing conditions, but some such as S. teitensis and S. goetzeana require changing temperature cycles such as warm days and very cool nights to trigger flowering. Once the plant has flowered, the single-petaled flowers are very accessible and easy for a hybridizer to work with. The anthers are easy to remove and break open for pollen. The stigma matures later and signals readiness for pollination by appearing wet or shiny. When pollen is placed on a receptive stigma, it will stick readily. The petals will drop out of the way in a few days and leave the fruit or seed pod to mature. The fruits may be long and narrow or short and fat depending on the species. Maturation of the fruit normally takes 5-6 months. The fruits are mature when they dry up and turn brown. The seed can be sowed immediately or stored until later. If the seed won't be planted for a while it is best to store the entire fruit in a closed container with a silica gel pack to keep the fruit dry. Fruits can be stored this way in a refrigerator for several years and still give good germination.

One of my guidelines for everyone who hybridizes is that you have a goal before making a cross. Hybridizers should consider what combination of traits they are attempting to pull together in the offspring. Once a goal has been set, it is much easier to choose the plants to be the parents in a cross. For example, are they trying to put the flowers of this plant on the foliage of the other? Are they trying to combine this flower's pattern with that flower's color? Hybridizers should always ask themselves what they envision as the outcome of the cross between the two plants they've selected as parents.

Table 1. Species crosses in genus Saintpaulia

- 1. 5a. grandifolia cl. grandifolia No. 237
- 2. 5b. grotei cl. confusa
- 3. 5b. grotei cl. difficilis
- 4. 5b. grotei cl. grotei
- 5. 5b. grotei cl. magungensis
- 6. 5c1. ionantha cl. ionantha
- 7. 5c1. ionantha cl. tongwensis
- 8. 5c2. diplotricha cl. diplotricha
- 9. 5f. orbicularis cl. orbicularis
- 10. 5g. pendula cl. intermedia
- 11. 5g. pendula cl. pendula
- 12. 5h. velutina cl. velutina
- 13. S. nitida
- 14. S. shumensis

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	+													
2	+	+												
3	+	+	+											
4	+	+	+	+										
5	+	+	+	+	+									
6	+	+	+	+	+	+								
7	+	+	+	+	+	+	+							
8	+	+	+	+	+	+	+	+						
9	+	+	+	+	+	+	+	+	+					
10	+	+	+	+	+	+	+	+	+	+				
11	+	+	+	+	+	+	+	+	+	+	+			
12	+	+	+	+	+	+	+	+	+	+	+	+		
13	0	0	/	0	/	0	0	0	/	0	0	0	0	
14	0	0	0	+	+	/	0	/	+	0	0	0	+	+

+= fertile /= partly fertile o = non-fertile

Additional fertile crosses:

5c1. ionantha cl. Sigi Falls × 5c1. ionantha cl. ionantha

5b. grotei cl. Mather No. 21 × 5c1. ionantha cl. ionantha

5f. orbicularis cl. orbicularis × 5f. orbicularis cl. orbicularis var. purpurea

This type of goal setting is a little more challenging when working with the *Saintpaulia* species. For example, all of the species have blue flowers. Since blue is the most dominant flower color, the offspring will always have blue flowers. Therefore, flower color is not really a consideration when hybridizing with the species. In fact, the flowers of the *Saintpaulia* species are pretty limited in terms of the variation they offer in a cross. You can bring in flower traits such as double petals, thumbprint pattern or fantasy flowers, but you'll have to use a cultivar with these mutations since the species plants don't have them. So if hybridizers can't plan a cross based on the flower traits of the species, what do hybridizers look for in using them as parents?

I have looked for traits in the foliage or the plant growth form as part of the goals when planning a cross with the species. There are many possible traits to work with. The foliage in the *Saintpaulia* species is extremely variable. The leaf texture ranges from smooth and shiny to extremely hairy. The leaf edges can be entire, toothed, notched and wavy. The leaves are different shapes running from oval to nearly round. The leaf tips can be smooth or they can be pointed. The plants can be single crowned, multi-crowned or robust trailers. Plant size ranges from miniature to very large. These then, are some of the traits that hybridizers can use as their goals in a cross.

One of my first experiments with the Saintpaulia species was to try and combine the dark hairy foliage of 5h. subspecies velutina clone velutina with the trailing growth form of 5b. subspecies grotei clone magungensis. The F1 hybrid of this cross trailed nicely, but didn't branch very freely. It only produced 2-3 trails on each plant. Some of the seedlings had the light green foliage of the 5b. subspecies grotei clone magungensis parent, but others had the dark heart-shaped leaves of the 5h. subspecies velutina clone velutina parent. All of the flowers were single blue droppers. This was expected as single flowers are recessive and would breed true. Blue flower color is dominant and would also breed true. In order to breed out the undesirable trait of single flowers, a cross would have to be made using a modern cultivar that had the mutation or trait for double flowers. It would have been possible to use a double-flowered trailer for this trait, but I wanted to stay with the species as much as possible and planned a second species cross to bring in the double flower trait.

The second cross used 5b. subspecies *grotei* clone Mather No. 21 and the miniature cultivar 'Ness' Angel Glitter'. The goal of this cross was to combine the trailing growth form of the species and the double flowers from the cultivar into the offspring. A miniature cultivar was used with the hopes of keeping the plant size smaller. Some of the F1 seedlings from this cross had double blue flowers, but the trailing habit was more bush-like rather than having long trails.

Crossing the F1 plants from the two lines together gave a number of good seedlings in the F2 generation. Several plants were eventually registered from this cross. All bear the alpha name "Yesterday's" to honor the use of *Saintpaulia* species in their ancestry. One plant, 'Yesterday's Valentine' has foliage similar to the 5h. subspecies *velutina* clone *velutina* grandparent. It also has the trailing growth habit of 5b. subspecies *grotei* clone *magungensis* and 5b. subspecies *grotei* Mather No. 21 grandparents. It has double flowers thanks to the cultivar 'Ness' Angel Glitter'. Another seedling, 'Yesterday's Shadow', is similar in the trailing growth form but has very dark, nearly black foliage and very dark blue double flowers.

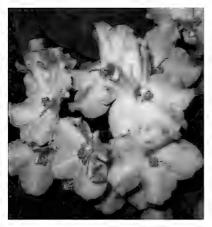
The surprise out of this F2 cross was the plant that was named 'Yesterday's Child'. This plant has bright green trailing foliage and leaf shape similar to the 5b. subspecies *grotei* clone *magungensis* grandparent. It branches well without pinching and forms a compact ball of foliage. The flowers are dark blue doubles which contrast well with the light green foliage. This plant has done very well in shows and won best trailer at the 2008 Tulsa convention. I have grown 'Yesterday's Child' as a windowsill plant. As long as it gets at least a quarter turn once a week, it shapes easily and will flower continuously. To date, 'Yesterday's Child' has probably been the most successful show plant of my hybrids from the *Saintpaulia* species.



Saintpaulia 'Yesterday's Child' grown by Allan Reith was awarded Best Trailer at the 2008 AVSA Convention (photo by Dale Martens)

A more recent experiment attempted to combine the thumbprint flower pattern on a trailer. Up until this point, there were no thumbprint trailing cultivars. The cross used 5b. subspecies *grotei* clone Mather No. 21 as the species parent. Having worked with this clone before, I was confident it would produce good trailing offspring in the F1 generation. For the thumbprint flower trait, I chose the cultivar 'Crimson Ice'. This is a standard African violet with dark red thumbprint flowers. I expected to get around 50% to 100% thumbprint offspring in the F1 generation. The thumbprint pattern is a genetic dominant, but I didn't know if 'Crimson Ice' was homozygous dominant for the trait or heterozygous. I expected all of the offspring to have blue flowers since blue is the dominant color to red. However, all of the F1 offspring would have the red flower color as a recessive, offering the possibility of getting red-flower offspring in the F2 generation.

As expected, all of the offspring were standard trailers that branched freely. The plants had much larger leaves than the 5b. subspecies *grotei* clone Mather No. 21 parent, apparently inheriting this size from the cultivar parent. About half of the offspring had solid colored flowers and half had thumbprint flowers. This suggested that 'Crimson Ice' is heterozygous for the thumbprint pattern. About half of the plants had single dropping flowers and the other half were semi-doubles or on rare occasions double flowers. This suggests that 'Crimson Ice' was also heterozygous for the double flower trait. Getting single-flowered offspring was not entirely expected and was something of a disappointment as about half of the offspring were now unsuitable to keep. This reduced the percent of offspring with the double dominant combination of semi-double flowers and thumbprint pattern to around 25%.





Saintpaulia 'Yesterday's Evidence' Saintpaulia 'Yesterday's Eye Spy' (grown and photographed by Jeff Smith)

Two F1 offspring from this cross have been tested and were recently registered. The first, 'Yesterday's Evidence', has white flowers with light blue thumbprint markings. The flowers are also wavy, an unexpected dominant trait from the 'Crimson Ice' parent. I was lucky to get this combination as the probability of getting wavy flowers, semi-double flowers and thumbprint pattern was $1/2 \times 1/2 \times 1/2$ or 1/8. The plant branches naturally and shapes well, and the flower count is high.

The second plant was named 'Yesterday's Eye Spy'. This plant has white flowers with dark blue thumbprint markings. This plant shows an interesting petal variation. Although it has single to semi-double flowers, it often shows 8-10 petal sections in the corolla. These are not exactly double petals, but the single corolla layer has been subdivided into more sections than the normal five. Small semi-double petals present in the center still show the dark blue and white color combination. This puts a dark blue dot in the white centers of the dark blue flowers, giving an "eye" effect. This marking pattern was behind the name chosen for the plant. 'Yesterday's Eye Spy' is a large robust trailer that branches naturally. The foliage is medium green and somewhat waxy. I already have some F2 seedlings from this plant coming along. I'm hoping that some of them will have the recessive red thumbprint flowers on trailing foliage.

It would be easy to give the impression that all of the crosses with the *Saintpaulia* species have been successful and give rise to very nice plants. That has not necessarily been the case. At least two notable failures I would mention are a cross between 5f. subspecies *orbicularis* clone *orbicularis* with a cultivar, and 5a. subspecies *grandifolia* clone No. 237 with a cultivar. Both crosses produced fertile offspring. The *orbicularis* cross produced plants with very weak flower stems. The flowers were too heavy to be supported by the stalks and the flowers laid on the foliage. The foliage was also very unruly with the leaves growing in all directions. None of the F1 plants were kept from the cross. The *grandifolia* cross' goal was to pass on the large size and foliage of this plant to the offspring. Again, the foliage was very unruly. The blooms were small and uninteresting. None of the offspring were kept.

While it might have been possible to breed out the undesirable traits from these crosses, the amount of effort required would have been considerable and none of the offspring were felt to have enough redeeming qualities to make the effort worthwhile.

It would probably take a lifetime to try hybridizing with all of the Saintpaulia species, subspecies and clones. Some plants that I would recommend for experimentation would be: 5a. subspecies grandifolia clone No. 299 for its smooth foliage and excellent growth form, 5c1. subspecies ionantha clone tongwensis Uppsala 3397 for its growth form and interestingly marked foliage (see picture on the cover of the July/August 2008 African Violet Magazine), 5h.subspecies velutina clone velutina for its hairy dark foliage, S. brevipilosa clone brevipilosa Mather No. 10 for its small size, smooth leaves and yellow veins, and S. nitida for its smooth shiny leaves. The last plant mentioned might be quite a challenge for hybridizers given its reported resistance to crossing with other species. However, Arisumi (1964) did report that this species was more receptive to hybridizing when fully mature so perhaps only additional patience is required with this plant.

In summary, I have been very pleased with the results of my experiments in hybridizing with the *Saintpaulia* species. The success of plants such as 'Yesterday's Child' in shows demonstrates that highly desirable and competitive plants can be bred from the species. I fully anticipate that 'Yesterday's Evidence' and 'Yesterday's Eye Spy' will enjoy comparable success once they are readily available to growers. The challenge to the hybridizer is not in the physical technique of hybridizing, but in choosing parents to complement and enhance the traits of the species. Careful attention to parent selection combined with dedication to keeping the species plants alive in cultivation should reward hybridizers with highly desirable plants for many years to come.

Literature Cited:

Arisumi, T. 1964. Interspecific Hybridization in African Violets. Journal of Heredity 55: 181-182. Clayberg, C.D. 1961. Hybridizing with the African Violet Species. African Violet Magazine 14: 105-107.

Smith, J., B. Pershing, and B. Price. 2008. *Saintpaulia Species and their Identification Numbers: History*, Present and Future. African Violet Magazine 61(6): 42-45.



Developing seed pods of Saintpaulia shumensis Mather EE (photo by Jeff Smith)

How I Became Hooked on Gesneriads

Nate Tschaenn ntschaenn@cbgarden.org Cleveland Botanical Garden, Cleveland, Ohio, USA

It all started in the late fall of 2007. I had recently been hired as a glasshouse specialist at Cleveland Botanical Garden, charged with maintaining and developing the Neotropical collections of the Costa Rican exhibit. I was constantly researching new plants, looking for ways to improve our collection. In particular I was looking for small plants that could flower in filtered light. In my search I kept coming back to the family Gesneriaceae.

I decided that the few species of gesneriads in our collection did not properly represent the numbers and diversity found in the New World tropics. The Gesneriad Society website was a helpful source of information, and then I saw the fantastic number of species gesneriads available through the Seed Fund.

I always enjoyed growing plants from seed, and there was something particularly exciting about growing gesneriads from seed. Perhaps it is the microscopic size of the seeds. The more I learned from the Gesneriads journal and other publications, the more excited I became. Seeing the possibilities for improvements in my exhibit, I decided to attend the convention in Denver in order to purchase plants and learn more.

All the members at the convention were very friendly and welcoming. Everyone I spoke with seemed interested and even excited about the plans I had for my exhibit, and I received many offers of assistance. It was delightful to be around so many people who were passionate about plants, especially a particular family of plants, and the passion was contagious. I returned from the convention with a duffle bag full of plants and an even greater excitement to begin some of the projects for which I had been planning to use them.

With my budding collection happily growing in our orchid greenhouse, I was ready to begin adding them to our permanent display. I had designed a plan to reconstruct one of my planting beds from its original long gradual slope into a much steeper slope and to interplant the slope with gesneriads, ferns, and other similar plants. After adding over 100 bags of soil and some large rocks to the area, I was finally able to begin planting. Many of the gesneriads were planted on this slope, which I started to call "Gesneriad Hill", while others were mixed in the rest of the exhibit. The Columneas made fantastic additions to our epiphyte collections and are now planted on tree trunks and branches throughout the biome.

The new additions to the Costa Rica collection have been well received here at Cleveland Botanical Garden. I have received numerous comments from staff, volunteers, and visitors about how nice the gesneriad slope looks. The gesneriads have become some of my favorite plants in the exhibit, and I would like to thank everyone at the convention who offered their help and support by providing me information and even donating plants or cuttings. I look forward to sharing with others the joys of growing them and continuing to learn more about them as our collection grows.



"Gesneriad Hill" at the Cleveland Botanical Garden (photos by Nate Tschaenn)





Gesneriads • Begonias • Rare Flowering Plants & Vines

KARTUZ GREENHOUSES 1408 SUNSET DRIVE, Dept. G

408 SUNSET DRIVE, Dept. G VISTA, CA 92083-6531 760-941-3613 http://www.kartuz.com Ask for catalog



CHAPTERS AND AFFILIATES — Presidents or Contacts

Arizona Desert Sun AV and Gesneriad Society — Ann Stoetzer, 8327 W. Claremont St., Glendale,

AZ 85305

Southern Arizona Gesneriad Society — Deb Weinman, 4587 N. Avenida del Cazador, Tucson, AZ 84718

1 ucson, AZ 64/16

Arkansas Northwest Arkansas Gloxinia & Gesneriad Society — Annie Osterhout, 708 Rustic Dr.,

Rogers, AR 72756

California American Gesneriad Society of San Francisco — Jon Dixon, 55 Tum Suden Way,

Woodside, CA 94062

Culver City — Charlotte Rosengrant, 2705 Krim Dr., Los Angeles, CA 90094

Delta Gesneriad & AV Society — Barbara Elkin, 2855 Gayle Ln., Auburn, CA 95602 Grow and Study — Al Striepens, 2225 Deepgrove Ave., Rowland Heights, CA 91748

Peninsula — JoAnna Behl, 361 Tioga Ct., Palo Alto, CA 94306

Colorado Gloxinia Gesneriad Growers — Allison Brigham, 1122 8th St., Golden, CO 80401
Connecticut — (Contact) Marcia Kilpatrick, 139 Kenyon Road, Hampton, CT 06247
Delaware AV & Gesneriad Society — Diane Abrahamson, 4003 Greenmount Road,

Wilmington, DE 19810

Florida Bloomin' Violets & Gesneriads of Palm Beach (Affiliate) — Martha Spyridon, 3548 Ensign

Circle, Delray Beach, FL 33483

Caribbean Basin AV & Gesneriad Society — Allan L. Mink, 430 E. Dayton Circle, Ft.

Lauderdale, FL 33312

Suncoast — Melissa McDowell, 1502 Eastbrook Dr., Sarasota, FL 34231 Tampa Bay — Jo Anne Martinez, 809 Taray de Avila, Tampa, FL 33613

Georgia Atlanta Gesneriad Interest Group (Affiliate) — William Crews, 5862 Musket Lane, Stone

Mountain, GA 30087

Illinois Northern Illinois — Janice Poole, 487 Kelly Ave., Yorkville, IL 60560

Kansas/Missouri **Heart of America** — Marian Schaaf, 19000 East 19th Terrace Court North, Independence, MO 64058

Massachusetts New England — Wanda Macnair, 59 Walker St., Cambridge, MA 02138

Michigan

Minnesota

Minnesota

Missouri

Nebraska/Iowa

Michigan

Southeastern Michigan

Richard Holzman, 3836 Jennings, Troy, MI 48083

Twin Cities Area — Mike Bagstad, 1776 Fry St., Falcon Heights, MN 55113

Gateway West — Gary Dunlap, 4189 Jarvis Road, Hillsboro, MO 63050

Omaha — Tom Bruning, 31233 Beechnut Rd., Treynor, IA 51575

New Hampshire Granite State AV & Gesneriad Society — Pam Hager, 3 Gervaise Dr., Derry, NH 03038 New Jersey Frelinghuysen Arboretum — Mary Lou Robbins, 21 Overlook Rd., Boonton Township,

NJ 07005

New York AV and Gesneriad Society of Western New York — Paul Kroll, 4325 Two Rod Rd., East

Aurora, NY 14052

Gesneriad-Dicts of Western New York — Doug Burdick, 2366 Doran Rd., Lima, NY 14485

Greater New York — Gary Vellenzer, 49 E. 12th St., Apt. 6B, New York, NY 10003

Long Island — Kay Rotando, 131 Taft Ave., Long Beach, NY 11561

Vestal AV & Gesneriad Society — Colin Dimon, 833 E. Circle Dr., Vestal, NY 13850
Oregon
Pennsylvania
Mt. Hood — Vivian Scheans, 4660 SW Dogwood Drive, Lake Oswego, OR 97035
Liberty Bell — Stephen Maciejewski, 2030 Fitzwater Street, Philadelphia, PA 19146

Tennessee — Molly Schneider, 608 Hillwood Blvd., Nashville, TN 37205 Washington Puget Sound — Rohm Gustafson, 158 18th Ave., Seattle, WA 98122

Washington, DC National Capital Area — Carol Hamelink, 13707 Concord Ave., Laurel, MD 20707
Canada Carefree — Elaine Stutt President. Contact Gloria Martin, 298 Michener Dr., Regina, SK

S4V 0J4, Canada Edmonton — La Rae Pohl, 97-53431 Reg Rd., Ardrossan, AB T8G 2B3 Canada

Ontario Gesneriad Society of Guelph — Bevin Anderson, 476 Woolwich St., Guelph, ON N1H 3X5, Canada

Toronto — Suzie Larouche, 50 John St., Suite 710, Toronto, Ont. M5V 3T5 Canada

Vancouver AV & Gesneriad Society — Arleen Dewell, #311-2366 Wall St., Vancouver, BC,

V5L 4Y1 Canada

Gesneriasts of Sweden — Rakel Dittmer, Henricksbergv.88, 136 67 Haninge, Sweden

Go to www.gesneriadsociety.org for chapter email contacts.

FOR YOUR INFORMATION

Membership Cards: The address label on the back cover of GESNERIADS is your membership card.

Bylaws: Copies of The Gesneriad Society Bylaws are available to all members by writing to Allison Brigham,

1122 8th Street, Golden, CO 80401-1009.

Sweden

Chapters: Report changes of chapter presidents to the Chapters and Affiliates Chair and the Editor.

Donations

The Gesneriad Society, Inc. is a tax-exempt organization with an IRS section 501 (c)(3) status for donations. You can make your donations online at www.gesneriadsociety.org. You may also send your donation (check payable to The Gesneriad Society) to:

Paul Susi, Development Chairperson 117-01 Park Lane South, Apt. C1A, Kew Gardens, NY 11418 For additional information, contact: development@gesneriadsociety.org.

Membership and Changes of Address

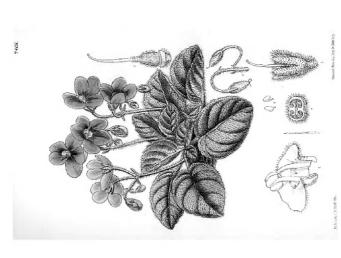
The Gesneriad Society Membership Secretary, Bob Clark, 1122 East Pike Street, PMB 637, Seattle, WA 98122-3916 USA

Changes of Address — Send changes of address to the Membership Secretary <membership @gesneriadsociety.org> 90 days prior to moving to avoid missing an issue. The Society is not responsible for replacing issues missed because of late notification of address changes. Back issues may be ordered from The Gesneriad Society Publications.

Renewals — Send dues to the Membership Secretary. A Renewal Notice is sent two months prior to the expiration date of your membership. (The expiration date is printed on your mailing label/membership card on the back cover of GENERIADS.) Please remit your dues prior to the expiration date to avoid missing an issue as we are not responsible for replacing issues missed because of late payment of dues. Back issues may be ordered from Publications.

		_	esneriad Society,					
Welcome – members The Journal for Gesn								
gesneriad seeds and a	wealth of information	ation about our Cl	napters, Flower Sho	ows, Publications,				
Research, Slide Progr	ams and Seed Fund	d. Membership beg	gins upon receipt of	dues.				
☐ New Member	Date							
☐ Renewal	Membership #							
Name	VYIME	GIVEN NAME	MINNE	TO DEPT A T				
Address		GIVEN NAME	MIDDLE INITIAL					
STREE	Т							
CITY		STATE		OUNTRY				
Email		Telephone						
(Rates in US\$)	Mailing in US 1 year	Mailing in US 3 years	Mailing outside US 1 year	Mailing outside US 3 years				
☐ Individual	\$25	\$70	\$30	\$85				
☐ Family	\$26	\$73	\$31	\$88				
☐ Sustaining (minimum)	\$35	\$105	\$40	\$120				
Research (minimum)	\$50	\$150	\$55	\$165				
☐ Life	Mailing in	US \$375	Mailing outside US \$450					
GESNERIADS is mailed fir	rst-class to members	outside the US and b	ulk-rate within the US	S.				
I wish to make an addi								
☐ Elvin McDonald Res	earch Endowment Fu	und 🗌 Nellie D.	Sleeth Scholarship E	ndowment Fund				
☐ Frances Batcheller Endowment Fund ☐ Speakers Fund ☐ Selby Gesneriad Project								
☐ In Honor ☐ Memo	ry of							
Please make checks or n	ıoney orders payable	, in US\$ on a US bar	nk to: The Gesneriad	Society				
Or, charge my US								
Card #CVV #								
Exp. Date	Signature		Amou	ınt				
Mail to: The Gesneria 1122 East Pik	d Society Members e St., PMB 637, Sea	ship Secretary, Bob attle, WA 98122-39	Clark, 16 USA					
	For application or	line: www.gesne	riadsociety.org					

First Quarter 2009 55



Saintpaulia ionantha illustration from Curtis' Botanical Magazine, Vol. 121, t. 7408 (1895)

GESNERIADS

1122 East Pike Street, PMB 637 Seattle, WA 98122-3916 USA

PERMIT NO. 116 LAWRENCE, KS 66044

NONPROFIT U.S. POSTAGE PAID

Return Service Requested

The Gesneriad Society, Inc.

MEMBERSHIP CARD